



Operating instructions elmeg CS410 / CS410-U / CS400 / CS400xt

Declaration of conformity and CE mark

This device meets the requirements of the following EC directive R&TTE 1999/5/EG:



»Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity«.

You can also request this EC declaration of conformity at the following Internet URL: http://www.funkwerk-ec.com.



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CS400 / CS400xt	1 2 2 2 2
C0410	_
CS410-U	2 3 3 3
Safety notes	4 4 4 5 5 5 5 6
Connecting and configuring a headset (not included in the scope of supply) Connecting a headset	6 7
Connecting the telephone to a PC	7
Changing the label	8
Pictographs	9
Setting the display language	9
Telephone display and buttons	11 12 12 12
Call signaling	IJ

Function keys and LEDs LED call signaling and answering machine Acknowledegement signals	. 13
Making Calls	15
Starting a call Dial number - no correction possible Dial call number - correction possible Dialing from the pabx telephone directory Dialing from the telephone directory Dialing from the VIP memory Direct dial-in using function keys from Dialing from the caller/memo list	. 15 . 15 . 16 . 16 . 16
Accepting / rejecting a call	17
Call Deflection	17
No number transmission (anonymus call)	17
Starting a call with a fixed extension number (MSN)	18
Redialing	. 18 . 19 . 19 . 19 . 20
Microphone activation/deactivation, open listening and hands-free calling . Mute on/off	20 21 21
Headset use	. 21
Announcement	22
Intercom	22
Automatic completion of call	. 24 . 24

Viewing and clearing call-back calls
Parking a call 24 Park 25 Unparking 25
Γracing (MCID). 25 Malicious call identification during ongoing call 25 After the caller has hung up the handset 25
Keypad and tone frequency dialing (DTMF dialing)
Keypad
Rückfrage
Conducting calls with several subscribers
Call waiting
Call switching
Broker's call
Three-party conference
Гelephone operation
Relephone directory 29 Settings for telephone book entries 29 Name and number 29 Outgoing number (MSN assignment) 29 Special dial tone (VIP-Tonruf) 29 Infotext 29 Add an entry to the telephone directory 30 Editing phone directory entries 30 Deleting a phone directory entry 30 Programming special dial tones (VIP-tones) for telephone directory entries 31 Programming an info text for a telephone book entry 31 VIP-Memory 31 Programming VIP entries 31 Editing VIP entries 31 Editing VIP entries 32
Caller- and Memo list 32 Caller list 33 Memo list 33 SMS / HUIS1 messages 33

UUS1 Inhibiting filter. Viewing the caller list. Further information about a call / memo Further information about a text message (SMS / UUS1) Deleting the caller / memo list. Deleting an entry. Deleting all calls Entering the number of the caller in the phone book of the phone. Entering a memo. The following example describes how to add a new number as a memo.	34 34 35 36 36 36 36 37
SMS and UUS1 text messages	37
SMS Text Messages (subject to terms of network provider)	
UUS1 text messages	
Creating and sending text messages Creating and sending text messages 3	38
Example: Creating a UUS1 text message	38
Important notes for entering numbers with SMS transmission	39
Sending an interlaced SMS	39
Viewing newly received text messages	39
Viewing received or sent text messages	40
Example: Reading a received UUS1 message	40
Permanently stored text messages (UUS1 only)	11
Automatic sending of text messages (UUS1 only)	11 11
Configuring the text message reception mode (UUS1 only)	17
Error when sending or receiving an SMS	#4 40
Error while conding or feetiving an SMS	#2 42
Error while sending an SMS	#2 42
Error while receiving an SMS	ŧΖ
Silent signalling	13
Manitaring costs	12
Monitoring costs	ŁJ
Procedures for charge rate transmission	1 3
Viewing and deleting costs	13
Viewing/deleting costs for the last call	
Viewing and deleting total costs	14 11
Viewing and detering total costs	#4 4 4
Viewing/deleting costs for specific extension numbers (MSN)	1 4
Setting the tariff factor and the currency	1 5
Programming a charge limit for an extension number	1 5
Enabling or inhibiting an extension number (MSN) for outgoing calls 4	16
Communication and charge displays	16
The following displays are possible during a call:	
Displaying information during a call	1U 17
Displaying information during a call	1/ 10
rrogramming caming time identification mode (CLIP/CLIK/COLP/COLK) 4	ŧŏ
System telephony	19

unction keys	49
unction key examples	49
Pirect dialing buttons (see page 16)	49
TMF/ keypad sequences (see page 26)	
Defining the MSN extension number for the next call (MSN assignment)	49
ine keys	
runk group buttons	
xtension keys	50
Connection keys	50
System-parked inquiry« button	
eam keys	50
eam log-on/off	51
Pay/ Night modes	51
nnouncement (see page 22)	51
lessage enable on/off	51
ntercom (see page 22)	51
ntercom enable on/off	51
oss/Secfunction	51
fer secretary	
all filter	
all rerouting	
Pirect dial-in	
leadset on/off	
uto-Answer	
xtension key for an answering machine	
oice Mail-Button	52
Ser on/off button (sertaste ein/aus (programming the system telephone's MSN	
xtension number)	
xtension number)	52
xtension number)	52 53
xtension number)	52 53 53
xtension number)	52 53 53 54
xtension number). tatus info button facro functions ED functions trogramming a function key.	52 53 53 54 54
xtension number)	52 53 53 54 54
xtension number)	52 53 53 54 54 54
xtension number)	52 53 53 54 54 54 55
xtension number)	52 53 53 54 54 54 55
xtension number). tatus info button facro functions ED functions rogramming a function key. sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony accessing the system menu for PABX systems	52 53 54 54 54 55 55
xtension number). tatus info button facro functions ED functions rogramming a function key. Sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony ccessing the system menu for PABX systems	52 53 53 54 54 54 55
xtension number). tatus info button facro functions ED functions rogramming a function key. sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony accessing the system menu for PABX systems Configuring and setting up the system telephone	52 53 53 54 54 54 55 55
xtension number). tatus info button facro functions ED functions rogramming a function key. sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony accessing the system menu for PABX systems	52 53 54 54 54 55 55
xtension number). tatus info button facro functions ED functions rogramming a function key. sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony accessing the system menu for PABX systems Configuring and setting up the system telephone	52 53 53 54 54 54 55 55 56
xtension number). tatus info button facro functions ED functions rogramming a function key. Using the function key mportant notes for LED functions ystem menu at a pabx with system telephony accessing the system menu for PABX systems Configuring and setting up the system telephone extended configuration	52 53 53 54 54 54 55 55 55 56 56
xtension number). tatus info button facro functions ED functions rogramming a function key. sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony accessing the system menu for PABX systems Configuring and setting up the system telephone	52 53 53 54 54 54 55 55 55 56 56
xtension number). tatus info button facro functions ED functions rogramming a function key. Sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony accessing the system menu for PABX systems Configuring and setting up the system telephone extended configuration accoustic eadset peaker	52 53 54 54 54 55 55 56 56 57 57 57
xtension number). tatus info button facro functions ED functions rogramming a function key. Sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony ccessing the system menu for PABX systems Configuring and setting up the system telephone extended configuration coustic eadset peaker all waiting	52 53 53 54 54 55 55 56 56 57 57 57 58
xtension number). tatus info button facro functions ED functions Frogramming a function key. Sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony ccessing the system menu for PABX systems Configuring and setting up the system telephone extended configuration ccoustic eadset peaker all waiting cknowledgement signals	52 53 53 54 54 55 55 56 56 57 57 57 58 58
xtension number). tatus info button facro functions ED functions rogramming a function key. Sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony ccessing the system menu for PABX systems Configuring and setting up the system telephone extended configuration coustic eadset peaker all waiting	52 53 53 54 54 55 55 56 56 57 57 57 58 58
xtension number). tatus info button facro functions ED functions rogramming a function key. sing the function key mportant notes for LED functions ystem menu at a pabx with system telephony accessing the system menu for PABX systems Configuring and setting up the system telephone extended configuration acoustic eadset peaker all waiting acknowledgement signals dile fandset	52 53 53 54 54 54 55 55 56 56 57 57 57 58 58 59 59
xtension number). tatus info button facro functions ED functions rogramming a function key. Ising the function key mportant notes for LED functions ystem menu at a pabx with system telephony ccessing the system menu for PABX systems Configuring and setting up the system telephone extended configuration coustic eadset peaker all waiting cknowledgement signals dle	52 53 53 54 54 55 55 56 56 57 57 57 58 58 59 59 60

Intercom
Answering machine
Date
Audio-Out
Listening to Audio-In over the speaker
•
Settings
Direct call
Call rerouting (call forwarding)
Deactivating call rerouting
Call waiting
Display contrast
Appointment
Auto-Answer
Headset
Setting the time
Call filter
Configuration 71
Configuration
inhibit
PIN
Menu
Outgoing
list
Display
Langu¬age
Conversation
Connection to a pabx
MSN (extension numbers)
Programming a specific PIN for an extension number (MSN)
D
Programming numbers
Programming function keys
Commands and keys for macro programming
The following commands are available for macro programming: 81
Tastenbelegung für die Macro programming
Macro programming examples:
Service
Name
SMS
Version
Data
Software
Telephone BIOS
The following functions are available in the telephone's BIOS
Downloading new firmware via the PC port
Downloading new firmware via the ISDN connection
Country 88

Telephone and PC
CTI / TAPI using the phone's USB port
CAPI using the telephone's USB port
Audio applications using the phone's audio jacks
Contents of the WIN-Tools CD-ROM
Installing the programs from CD-ROM
Appendix
Declaration of conformity and CE mark
Default telephone settings
Technical specifications 96 ISDN port (CS410, CS400) 96 Up0-Connection (CS410-U) 96 USB port 96 Audio connections 96
Index
Brief description of functions

You can connect the ISDN system telephone at the internal ISDN connection of an pabx system (S0 or Up0. The ISDN telephone is connected to the ISDN network through an ISDN jack (Western or RJ45). The ISDN telephone provides system features when connected to certain elmeg PABX systems. For example:

- Dialing from the pabx telephone directory
- · Sending and receiving SMS messages
- Messaging and intercom calls with other system telephones connected to the pabx.
- Function keys for controlling special PABX features (switching call modes, team log-in/off, line buttons, extension buttons).
 The status of the programmed features can be displayed by means of LEDs assigned to the specific
- function keys.

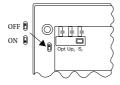
 Accessing the PABX system menu. This menu provides further pabx features.

The internal ISDN connection of the PABX systems automatically interfaces with the system telephone. Please refer to the operating instructions of your PABX to determine whether these typical system features are provided with the various system telephones.

CS400 / CS400xt

This system telephone is delivered with a key extension module (T400/2), providing you with 10 additional, freely configurable keys.

It is designed for connection to an internal S0 port (4-wire cable) of a PABX system. The system telephone is not equipped with a USB or serial port for configuration or other uses. This phone must be configured via the internal ISDN port using the WinTools Professional Configurator. There are also no »Audio functions« implemented and you can not use the Answering machine or Up0 modules or functions. None of the functions for this module are shown in the display, nor can they be used.



This telephone is equipped with the function »Emergency operation «.»Off« = Emergency operation off, »On« = Emergency operation On. meaning it can be operated at NT via the PABX system on a loss of 230 V ~ power. If more than one telephone is connected to the ISDN system, the emergency operation function may only be configured on one of the ISDN system telephones. All calls are signaled at this phone. The volume of the ringing tone is set to low. In addition to making normal calls, the following functions are

also available:

- Selection of a call number from the telephone directory or the speed dial memory after lifting the handset
- Display of call duration and costs.
- Mute.
- Terminate call.

The phone number (MSN) that the network service provider assigned to you as the first (master) number will be transmitted to external subscribers. Charge billing is effected for this. Observe the information concerning emergency operation in the PABX system. Ongoing connections are interrupted in the event of a power failure.

Refer to the operating manual of your PABX system to see if your system supports emergency operation.

Configuring emergency operation (PtMP and PtP connections)

Emergency operation is not configured as a factory default feature. A slide switch is located on the bottom of the system telephone that can be used for configuring emergency operation.

To configure the emergency operation feature, slide the switch on the left side on the bottom of the phone down. To de-activate emergency operation, slide the switch back to the top position.

Attention: Before you move the emergency operation switch unplug the ISDN connector for the system telephone. Use a non-metallic tool to move the switch.

Configuring emergency operation at a point-to-point (PtP) connection

If you wish to also use your system telephone for emergency operation at a PtP connection you must also activate this feature using the PC configuration for your system telephone. You can use the configuration program to set emergency operation at a PtP connection.

Making calls during emergency operation at a point-to-multipoint connection

The system telephone begins emergency operation when power supply for the PABX system and the NT is lost. Emergency operation, followed by a telephone symbol is then shown in the system telephone display.

If the 230 V AC power supply is restored during an ongoing call, all normal, configured functions are available again only after you hang up the handset. If the $230 \text{V} \sim \text{power supply}$ is restored when the handset is in the cradle, the emergency operation display is replaced by the normal display when the handset is lifted, or on the next call.

Making calls at emergency power supply mode on a point-to-point connection

During emergency power supply mode at a point-to-point connection, you will see the normal operation displays.

CS410

This system telephone is designed for connection to an internal S0-port (4 wires) of an pabx system. If you wish to connect the telephone to an internal Up0-port, be sure to install the internal Up0/S0-module into the telephone or use the external Up0/S0-converter.

CS410-U

This system telephone is designed for connection to an internal Up0-port (2 wires) of an pabx system. The internal Up0/S0-module or the external Up0/S0-converter is then no longer required.

Setting up/ Configuring the system telephone

You can also perform a limited configuration for the supported features at the system telephone itself. Complete configuration can only be performed however using the Professional Configurator provided on

the WIN-Tools CD via the USB port of the system telephone, or using the internal ISDN port of a PABX system.

System-telephone extension modules

 $Your \ telephone \ is \ equipped \ with \ two \ slots \ for \ connecting \ optional \ modules \ and \ a \ dedicated \ interface \ for \ an \ additional \ "T400" \ keyboard.$

Up0/S0-module (CS410 only)

• Install the Up0/S0-module into your telephone if you wish to connect the phone to a Up0-port of a pabx. The external Up0/S0-converter is then no longer required.

Answering machine module

This module provides your telephone with a multi-function digital answering machine.
 FOR EXAMPLE.: Separate programming for each MSN extension number, time-control feature for voice announcement related to specific MSN extension numbers, automatic notification with newly recorded calls, recording of dictations, logging of calls, remote polling protected by PIN.
 A special key and LED are provided for operation of the answering machine.

Additional »T400« keyboard

- This additional keypad has 20 buttons with an inset LED, which can be used on two levels as function buttons. The LED is assigned to the first level. Another two LEDs are provided for indicating additional information.
 - Up to three additional keypads can be connected (cascaded) to your telephone. A plug-in power supply is required if you use more than one additional keypad. Use only the approved T400 power supply units available as accessory / serial number 220872.5 or T400-UK / serial number 220873.3.

Additional »T400/2« keyboard

This additional keypad has 10 buttons with an inset LED, which can be used on two levels as function buttons. The LED is assigned to the first level. Another two LEDs are provided for indicating additional information.

Safety notes

- Storage temperature: -25°C ... +70°C.
- Operating temperature: +5°C... +40°C.
 Only connect the telephone when the permissible ambient operating temperature has been reached.

Please note that condensation on or in the telephone may occur when moving from cold to warm surroundings. Only remove the telephone from the package when the permissible ambient operating temperature has been reached.

- You should not make calls or connect or disconnect any lines during thunderstorms.
- Only attach the connecting cords at the connections provided.
- Make sure phone cables are installed in a safe manner to prevent tripping.

- Avoid the following:
 - Direct sunlight
 - Sources of heat (for example radiators)
 - Electronic devices (for example stereo components, office equipment or microwave devices)
 - Ingress of moisture or liquids
 - Aggressive fluids or vapors Dusty environment
- Do not use the phone in excessively humid rooms or hazardous locations.
- Never open the telephone, or accessories, yourself.
- Do not touch plug connectors with pointed, metal, or moist objects.
- Place the phone or accessories on a non-skid surface.
- When required, clean the telephone with a slightly moistened cloth.
- Only use approved accessories.

Elektrostatic charges (protection against electrostatic charges)

The telephone is supplied with enhanced ESD protection against the effects of electrostatic discharge that exceeds the protection level cited in the approval specification. Elevated ESD levels should nevertheless be avoided to the greatest possible extent. In some cases, electrostatic discharge levels can far exceed the approval limits or the resistance levels already implemented in your telephones. Eliminate the causes or conditions that promote these elevated ESD levels, such as insufficient humidity or carpeting. The telephone manufacturer does not assume any liability for damage caused under such circumstances.

Unpacking and placing the telephone

Unpacking

- ISDN system telephone
- Handset with handset connecting cord
- 2 feet
- 1 ISDN connecting cord, approx. 6 m
- PC-Connection cable / USB cord, approx. 3 m (not with CS400)
- PC-audio cable, 3.5 mm stereo jack, approx. 2,5m long (not with CS400)
- Adapter cord for headset with a 4 pin connecting cord (8pin/4 pin)
- Cable holder (self-adhesive after removing the film) (not with CS400)
- Operating instructions and labels for function keys Supplement with telephone safety instructions
- WIN-Tools CD-ROM with:
 - Professional Configurator, telephone directory-, download- and sound manager, TAPI-, USB-, CAPI- and NDISWAN driver, Adobe Acrobat Reader, Operating instructions and Adobe Acrobat file for the printing of individual labels

Placing the telephone

Before installing the telephone you must mount the rear feet for the telephone at the positions (6) shown in figure 1.

Please note that the feet of your telephone may leave marks on sensitive surfaces, such as furniture. The manufacturer of the telephone is not liable for any such damage. Therefore, use appropriate non-skidding pads under the phone.

Cleaning the telephone

The ISDN system telephone has been manufactured for normal, everyday use. When required, clean the ISDN system telephone with a slightly moistened cloth, or with an anti-static cloth. Never use a solvent to clean the phone! Never use a dry cloth; electrostatic charges could damage the electronics in the system. It is essential that no liquids penetrate into the inside of the ISDN system telephone, as this could destroy the phone.

Connecting the telephone (ISDN and handset cords)

Please connect the ISDN cable and the handset cable. Otherwise you will not be able to operate the phone.

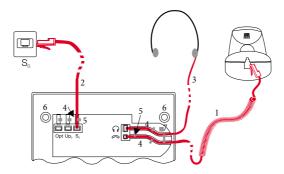


Figure 1

Connecting the handset connecting cord

Connect the handset cord (1) as shown in figure 1. Lay the handset cord in the cord groove (4) and lock it below the two cord retainers (5).

Connecting the ISDN cord

Connection to the S0 (CS410, CS400)

Connect the ISDN cord (2) as shown in figure 1 (S0-connector). Ensure that the longer ISDN connector is plugged into the ISDN jack and the shorter ISDN connector into the ISDN socket on the telephone. Then lay the ISDN cord in the cord groove (4) and lock it below the two cord retainers (5).

Connection to the Up0 (CS400,CS410 with Up410/S0-module or CS0-U)

Connect the ISDN cable (1) as shown in figure 2 (Up0-socket). Ensure that the longer ISDN connector is plugged into the ISDN jack and the shorter ISDN connector into the ISDN socket on the telephone. Then lay the ISDN cord in the cord groove (2) and lock it below the two cord retainers (3).

CS410 telephones equipped with a Up0/S0 module or CS410-U phones may not be connected through the S0-socket to an ISDN connection (e.g. internal ISDN port of the PABX).

Important notes for connecting the telephone to the UpO

- You can connect a further ISDN device with an S0-port (for example an ISDN card or a another telephone) at the S0 jack of the telephone. For each additional ISDN device this connection provides a power of 1 watt.
- If you connect an internal ISDN bus (for example for a telephone in a neighboring room) at the SO
 jack, then this ISDN bus must be equipped with terminating resistors. For more information on installation procedures please refer to the Assembly instructions for your PABX. <P255.

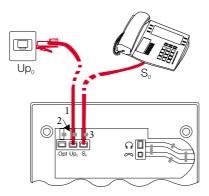


Figure 2

Connecting and configuring a headset (not included in the scope of supply)

You can connect a headset to your telephone. Ask your dealer which headset models can be used or retrieve the required information from the Internet.

The telephone is equipped with an 8-pin socket for connecting a headset. Headsets with a DSHG-interface (e. g. cordless DECT-headsets) can be connected to the telephone right away. Special accessories are not required for this. For the connection of standard headsets (connection cable of 4 pins, e.g. U10PS) use the supplied adapter cord.

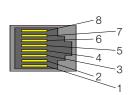
You can connect / install the optional Answering Machine module and a headset with a DSHG port simultaneously to/in a system.

Connecting a headset

Connect the headset as shown in figure 1 on page 5 to the telephone's dedicated headset socket. Then lay the headset cord (3) in the cord groove (4) and lock it below the cord retainers (5).

If the headset cord does not fit in the cord guide, attach the self-adhesive cord holder supplied with the system to the bottom of your telephone (7). Then, route the headset cord under the cord holder.

Assignment of the headset jack pins (CS410 / CS410-U)



- 8 transmitter
- 7 V + (3.3V)
- 6 Microphone (Ground)
- 5 Handset (3.3 V switchable via resistor)
- 4 Handset (ground)
- 3 Microphone +
- 2 Ground
- 1 receiver

Figure 3

Assignment of the headset jack pins (CS400 / CS400 / CS400xt)

- 4 3
- 4 Microphone (Ground)
- 3 Handset
- 2 Handset (ground)
- 1 Microphone +

Figure 4

Further settings when using a headset

You can use the handset or the headset for making calls. With headset operation, the following settings are required or possible:

- When configuring your telephone, program one of the function keys for headset operation (headset button, see page 52).
- You can use the headset connected to your system automat ically for certain actions on the phone (see page 67).
- If a special support feature is stored in your telephone for the headset your are using, set your phone for that headset model (see page 56).
 - For example, the LED in the microphone extension for »Firefly F142 N« from Plantronics can be activated by the telephone.
- If you would like to use the auto-answer feature with your headset, set the time after which a call is answered (see page). When configuring your telephone, you should program a function key to be used for activating or deactivating the auto-answer feature.
- If you have configured your phone for automatic headset use, you can poll the answering machine using the headset.

Connecting the telephone to a PC

Connecting the PC connection cable (USB)

Use the USB cord supplied with the system to connect the telephone to the PC, or to the hub. If you use a different USB cord, ensure that the distance between the telephone and the PC, or between the telephone and the hub, does not exceed five meters, depending on the type of cord you are using.

Connect the USB cord (4) as shown in figure 5 (PC-socket). Plug the USB connector (type A) into the corresponding socket of your PC and the USB connector (type B) into the USB socket on the back of the telephone (1). The telephone is automatically detected by the PC, provided that both devices (telephone and PC) are switched on.

Installat ion of a device driver is started automatically the first time you connect the telephone to the PC. Insert the WIN-Tools CD-ROM supplied with the telephone and follow the instructions displayed on the screen.

You will need a hub (USB distributor) if you plan to use several USB terminal devices at your PC. Connect the hub to the USB port of the PC. You can then connect other USB terminal devices, including the telephone to the hub.

Connecting the audio cable (Audio in / Audio Out)

The telephone is equipped with an input (2) and an output (3) for audio signals. Both these ports have a 3.5 mm stereo socket. When using the optional answering machine module, you can connect the telephone via these ports to the PC sound card in order to upload announcements into the phone or save recorded messages on the PC.

You can also use specific telephone features with the Audio-Out output (see page 61). Connect the speakers (5) with a 3.5 mm stereo jack to the telephone's Audio-Out (3) output, as shown in figure 5.

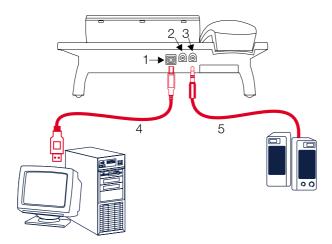


Figure 5

Changing the label

The label panels for the function keys are included on a separate sheet enclosed in the operating instructions. Cut out the label you wish to use.

To change the label panel, press the flexible cover together between your index finger and thumb and lift it out. The label panel can now be changed.

You can fill in the label for your telephone with your own information and then print it out using the Profes-

sional Configurator. Also available on the WIN-Tools CD-ROM is an Adobe Acrobat file containing templates that you can also fill in and print out.

Pictographs

The pictographs (symbols) described below have been used in these operating instructions to illustrate some procedures for setting and using the telephone.

	Lift up the handset or start prepared dialing.
*	Replace handset. The telephone is idle.
(C)	A call is signaled. The ringer melody sounds.
)	You are conducting a call.
X	Athree-partyconferencecallisinitiated.
~	You hear the positive or negative acknowledgement signal.
000	Select the call number, code, character or text.
X	This symbol prompts you to select a certain digit or character.
0 9 wxyz	Press the appropriate button on the push-button set.
* #	

Setting the display language

You can select the language of your display.



Telephone display and buttons

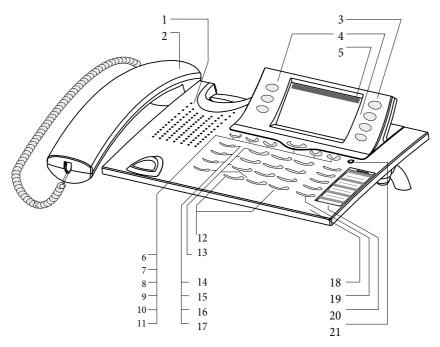


Figure 6

1	Speaker
2	Handset with connecting cord
3	Answering machine button on the telephone (optional module). With the CS400, the pabx menu will be loaded.
4	6 Softkeys
5	Seven-line backlit display
6	Menukey: This key opens the programming menu. If you are already located in a menu and then press the key, either menu-specific functions are shown, or you are moved back one programming step.
7	ESCkey: Pressing the Esc button during programming returns the telephone to its idle status.
8 / 10	$\label{eq:control_state} \begin{subarray}{ll} \verb wleft < / > \verb wleft < / > & arrow buttons: The arrows > & (and) & > & (in the right corner on the top line of the display indicate that you can call up further functions on the lower lines using the arrow buttons. \\ \end{subarray}$
9	OK button: Pressing this button confirms an entry or stores a setting in the telephone.
11	Ckey: Press this button to move back one menu step in the menu. If you are currently in the input mode, this button can be used to delete individual characters.

12 Asterisk key/ hash key 13 Dial buttons 14 Open listening / hands-free button Ending a call 15 16 Redial button Inquiriy button 17 Microphone 18 $5\ Five programmable function keys with LED: Each button has an inset two-color LED (level$ 19 1 - red / level 2 - yellow). These LEDs can be used to indicate certain functions. 20 Label panel for function keys Status-LED, Call signaling LED, received UUS and SMS messages and MWI (red) and answe-21 ring machine (yellow). It is possible to configure the desired functional display for messages

Telephone display

and calls.



Figure 7

- 1 Date
- 2 Time
- 3 21 characters per line
- 4 Arrow: Further menu items accessible by using the arrow keys.
- 5 Answering machine button on the telephone (optional module)
- 6 Arrow: Indication of the softkey that can be used in the current menu.

A checkmark » a following a display text indicates that this feature is active.

The telephone is equipped with a seven-line backlit display. Backlighting is automatically switched on or off.

After connecting the system to the internal ISDN connection of your PABX system, the date and the time are shown on the display. The date and time are imported automatically from the pabx system. The text displayed for a function is always located next to the corresponding softkey. When you press the softkey, the next level is displayed. If not all information fit into the screen, this will be indicated by » « « or » « «. To have the other characters displayed, press the R-button first and then the corresponding arrow button.

Various telephone display shots are illustrated in this operator's manual to help explain the different settings and use of the system. A wavy line at the top or bottom of an illustration indicates that not all of the 7 lines of that particular display are shown (only pertinent lines shown).

Special feature for displaying lists in the display

Several entries are shown in the display as a list for certain settings or when using the phone. These lists are required for telephone directory or VIP memory programmings for example.

The active entry (the one you have selected) is highlighted. Use the menu or the OK button to display further features or select the highlighted entry.



Special feature for changing existing entries

You have various options available for changing existing entries (for example names or numbers).

Example 1:

You may want to change the telephone number of an entry, because that subscriber has moved to another place.

When you use the push-button set to enter the first digit of the new number the existing number is deleted completely. Enter the other digits of the new number.

Example 2:

You wish to change parts of a name in a telephone directory listing, because the name has changed (e. g. in the case of marriage).

Use the arrow buttons to specify the storage position for that entry. You can overwrite an existing surname right away or delete it with the C-button and then enter the new name.

Key assignments for entering texts

The assignments for the keypad for entering letters, digits and special characters are as follows:

Button				Press			
Button	1	2	3	4	5	6	7
1	1						
2 ABC	A	В	С	2	Ä	Å	Æ
3 DEF	D	E	F	3			
4 gHI	G	Н	I	4			
5 JKL	J	K	L	5			
6 MNO	M	N	О	6	Ö	Ø	
7 pgrs	P	Q	R	S	7	ß	\$
8 TUV	Т	U	V	8	Ü		
9 wxyz	W	X	Y	Z	9	¥	
*	*						
Ħ	#						

When you press the key the first time a space is inserted. When you press this key a second time several special characters are shown in the display. Press the appropriate key to select the corresponding special characters in the corresponding special characters in the corresponding special characters in the corresponding special characters.

Input mode for entering letters

You ha«.

»ABC« The next letter that you enter is shown as a capital, all others as small case letters.

Example: »Dean, James «.

»ABC« Every letter that you enter is shown as capitals.

Example: »Dean, James «. < R «.

When you start entering texts, the input mode is always »Abc«. Press the Recall flash button to change the input mode. To insert a character while in »Abc« mode, press the C key.

Call signaling

Call signaling is effected using the ringing tone that has been set for the dialed number (MSN) in each telephone.

If you are using the telephone at an internal ISDN connection of certain elmeg PABX systems, you can program special ringing melodies for internal and external calls.

Function keys and LEDs

You can program the five function keys on two levels with different functions via the PC configuration program for the telephone. Each key is equipped with an LED that is used to display the active function. Each color is assigned to a particular level for the function key. (level 1 - red / level 2 - yellow). Press the key two times to reach the second level for the function keys. This must be done at a short interval.

LED call signaling and answering machine

flashes red: Incoming calls

lit yellow: Answering machine switched on

flashes yellow: New messages recorded by the answering machine

Acknowledegement signals

Entries or settings you make at your telephone are sometimes confirmed by acknowledgement signals.

Positive acknowledgement signal (1 long tone):

The positive acknowledgement signal indicates that your input has been accepted and stored by the telephone.

Negative acknowledgement signal (3 short beeps):

You will hear the negative acknowledgement signal when your input has not been accepted by the telephone, or when invalid input has been made.

Displays for programmed features



When the telephone is in the idle state, additional information about functions that have been configured are shown on »Info« line of the display. In this example:

» - t - S - R - «.

Press the softkey » Info« if you wish to get more information about the configured functions.

29.05.05 07:21
Info -T-S-rTel. drctrv
Idle
VIP
Caller list

If you have programmed several features, press the arrow buttons to view the various settings.

Inhibit/Menu access:

Displays	Configured function
»D«	Active appointment reminder set.
» I «	Dialing control or Call filter active, Access to telephone menus is protected.
»q«	Function »Silent signalling« (notice tone only) active.
»Q«	Function »Silent signalling« (all calls) active. (All call signals are switched off)
»U«	Call forwarding active.
»i«	Informationen on programmed function keys FOR EXAMPLE.: Message enabled / inhibited.
» I «	Informationen through Messages (MWI) For example, auf Ihrer t-Netbox
»%«	Answering machine, time control, notification or remote operation (option module) active.

Starting a call

Dial number - no correction possible



Dial call number - correction possible



To change the number or to correct a wrong entry, select the wrong figure with the arrow buttons and press C to delete it. Now enter the correct number.

If you wish to conduct the call using the handset, just lift it up after dialing the number. Any time during a call you can switch back and forth between hands-free calling, speaker function and use of the handset.

After you have dialed the number you can also press the speakerecall flash button to have the number dialed and to use hands-free calling.

If a call can not be put through (e. g. number is inhibited via the dial ranges control, or the account for the number/MSN is empty), a corresponding message will appear in the display. e.g.:» Inhibit.: dial number «, when the dialing filter is active.

When you lift the handset and there is still no connection set up, you can pick up a waiting call using the soft-key »pick up« without replacing the handset again. You are notified of the call in advance by a brief message. When you configure a connection key or a macro key you can pick up a call immediately just by pressing that key.

Other options for dialing without lifting the handset

The option of dialing without lifting the handset and of correcting or adding to a number also exists during dialing:

- from the last number redialing memory (see page 18).
- from the caller/ memo list (see page 32).
- from the telephone directory (see page 29).
- from the VIP memory (see page 31).
- with the function keys (see page).
- via CTI (TAPI) features (see page 90).

If you are using one of these options, you can make further entries prior to initiating the call. You can define which number (MSN), if any, is to be transmitted to the party being called. You can use the Professional Systel-Configurator to set which function is to be assigned directly to the softkey »Telephone directory«: »Local« or »PABX«. You can reach the second function by pressing the R (Recall flash) key.

Dialing from the pabx telephone directory

When you use this telephone with a system telephony supporting pabx system, you can dial from the telephone directory of the pabx.



Dialing from the telephone directory

You can store up to 250 names and numbers in the telephone directory. To select a name, you can page through the directory using the arrow buttons, or enter the specific first letter(s) of the name using the push-button set.



For information on how to program and configure the telephone directory, please refer to page 29 of these operating instructions.

Dialing from the VIP memory

You can program VIP numbers for each of the ten dial buttons 1 ... 0 including a name (20 characters max.) and a telephone number (26 digits max.).



For information on how to program VIP entries, please refer to page 31 of these operating instructions.

Direct dial-in using function keys

Direct dialing is initiated using the direct dialing keys. Each of the five keys can be programmed with two functions or direct dialing numbers.



Use the function keys to select the desired number.

If you wish to dial a number from the second level, press the corresponding key two times. This must be executed at a short interval.

You can program the direct dialing / function keys via the PC configuration program for the telephone or during extended configuration.

from Dialing from the caller/memo list

The phone has a combined caller and memo list. A maximum of 30 entries (calls, memos, SMS messages or UUS1- messages) are stored in this list. Entries in the caller or memo list are indicated by the »Caller I is t « softkey.



For more information about the caller/memo list, please refer to page 32 of these operating instructions.

Accepting / rejecting a call

In its initial state the telephone will accept all calls, regardless of the selected MSN. If two calls are signaled simultaneously the first one is accepted when you lift up the handset. The second call can still be signaledy a call waiting signal.

The telephone display shows the caller's number or the number the caller has dialed (MSN- $1 \dots$ MSN-10, or the assigned name).



If you are unable, or do not wish to accept a call, you have the option of rejecting this call. Press the » r e - j e c t « softkey and the call will be no longer be signaled at your telephone.

If you are a member of a team, then this call will continue to be signaled at the phones of your team. If the call was signaled only at your phone, the caller will hear the busy signal when the call is rejected.



Call Deflection

If you are unable, or do not wish to accept a call, you have the option of forwarding this call. Press the soft-key $\times x - f \in r$ «, if you wish to forward this call directly to another subscriber. The call number of the forwarding target can be preset for each call number (msn) when configuring the telephone.

After pressing the \times x f e r \times softkey, you can forward the call to the preset call number or enter a new call number.



No number transmission (anonymus call)

You can block the display of your telephone number at your caller's telephone if desired. You can set this function specifically for the next call, or permanently (see page 48).

Suppressing calling line identification for the next call

During an external or internal call, you can prevent the number from being transmitted (displayed) to the party you have called.



When a call is signaled, you can decide before accepting the call whether your number is to be transmitted to the caller. If your phone is the final destination of call rerouting you can use this procedure to prevent the caller from seeing the final destination phone number (i. e. yours).

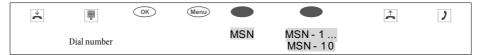


Starting a call with a fixed extension number (MSN)

You can conduct an internal or external call such that a defined number (MSN) is transferred from your telephone to the party you are calling. This number must have been entered previously in your telephone. When you call, either number that is transmitted is shown in the second line of the display (»msn1... msn-10«) or the name that you have assigned to this number (MSN).

You can initiate dialing using the set extension number (MSN) as explained in the following, or you can use a programmed function key for this.

Use the WIN-Tools telephone directory manager to set up and configure an MSN extension number to be used for outgoing calls.



Redialing

The previously dialed call number is stored in the redial memory.



Extended last number redial

In the extended redialing function the telephone numbers of the last 20 calls, connections (calls) or text messages are stored. You can view these by pressing the redial button or the arrow buttons and subsequently have them redialed automatically.



The last dialed number is displayed. At the end of the second line the status of this entry is indicated by the letters displayed there.

» V « Connection
 »A « Call
 »M « Mail (extension numbers, to which SMS or UUS1 messages were sent)
 » I « Calls configured for automatic redialing.
 no entry You placed a call to somebody but did not reach him/her, or his/her line was busy.

Deleting a telephone number from extended redialing or save as a memo

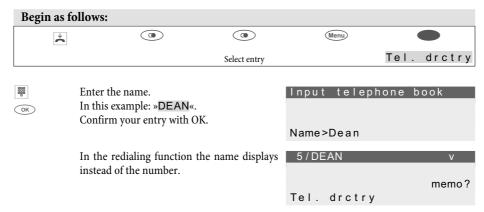


Press the softkey below » delet et e?«, to delete the displayed entry immediately. Press the » memo?« softkey to write the entry as a memo to the memo list. The entry will then be deleted from the memo list. The next telephone number is then displayed.

For an entry in the memo list, the softkey »Caller list « is shown on the display.

Importing numbers from extended redialing into the telephone directory

You can import a number that is present in the list for extended redialing into the telephone directory of your phone (see page 29).



Automatic redialing

If you placed a call to a subscriber whose number is busy or who does not answer, you can then activate automatic redialing which will call that same subscriber again after about 10 seconds.



After around 10 seconds the hands-free calling function of your phone is activated and the number is dialed automatically. This is repeated for up to around 2 minutes.

Up to 20 call attempts are made if the subscriber can still not be reached. After 20 unsuccessful attempts, automatic redialing will be cancelled. You will hear the negative acknowledgement signal in that case.

If automatic redialing is active, the »Autom. repeat request « softkey is shown on the display. Press the right arrow button or the »Continue« softkey, to return to the normal idle state display.

Suspending automatic redialing

You can suspend automatic redialing that you have started any time using the appropriate procedure and place a normal call. To suspend automatic redialing, press the open listening/hands-free button during automatic redialing.

After the call automatic redialing starts again.

Deactivating automatic redialing

You can deactivate automatic redialing at any time. There are no further call attempts.

To deactivate automatic redialing during the dialing process press ESC.

If you like to deactivate automatic redialing in the idle state of the phone, proceed as follows:



Microphone activation/deactivation, open listening and hands-free calling

Mute on/off

The mute function allows you to switch off the handset microphone during a normal call, or the telephone microphone during hands free calling. The subscriber you are calling will then no longer be able to hear the conversation you conduct with persons in the room (room inquiriy). However, you will continue to be able to hear the party on the phone.



Call duration and cost logging are continued even if the microphone has been muted.

Speaker function

The "Open listening" function can be activated when there are other persons in the room who wish to also participate in the call. You continue to talk into the handset while this function is active. You can set the volume during the call as described on page 57.

Please inform the party you are calling that open listening is activated. " (" indicates that open listening is activated."



When you hang up the handset while open listening is active, both open listening and the call itself are terminated.

Hands Free Calling

The handset remains in its cradle during hands free calling. The built-in microphone and the speaker are activated. Any actions are carried out using the open listening / hands-free button only. You can switch back to normal »handset« calls at any time during hands free calling by merely lifting up the handset. You can also switch from normal »handset« calling to hands free calling when you hang up the handset after pressing the open listening / hands-free button. During hands-free calling acoustic signals such as the call waiting signal are not transmitted.

Please inform the party you are calling that hands-free calling is activated. Disp3xx>|« shows that hands free calling is activated.



Headset use

You can connect a headset to your telephone. Connect and configure the headset as described on page 6. You can use the handset or the headset for making calls.

Activating and deactivating the headset

For headset operation, one of the functions buttons must be configured as a headset key. The LED assigned to this key indicates, whether the headset in switched on or off (LED on or off).



Activating and deactivating open listening while using the headset



Announcement

The message function allows you to establish a connection to a different telephone, without this connection having to be actively accepted (picking up the handset, hands-free calling or loudspeaker). This is a simplex (one-way) call in which only the subscriber that initiated the message will be heard.

As soon as a telephone accepts the message, the connection is established. You will hear a brief acoustic tone before the actual message.

For a message call, enter the internal number of the party you wish to call. You also only need to enter the internal number with direct exchange line access. e.g. *22% instead of *22%.

When a message comes in for your telephone, the number or the name of the party sending the message appears in the display. The message is preceded by a brief acoustic signal over the speaker. The message can be terminated at any time by pressing the ESC key.

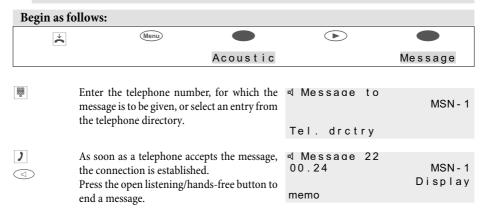
Messages are accepted automatically by the phones being called by activating the open listening function when:

- the phone is idle.
- messaging has been enabled for the pabx (control by means of the »Enabling intercom« function key).
- the »Silent signalling« function is not activated.

Messages can also be received even if the »Station guarding« function is active when the »Enabling messages« function key has been programmed and is activated.

You can initiate a message using the procedure described below, or using a programmed function key. You can also initiate a message during an ongoing call (inquiry call) using the corresponding function key.

You can only utilize this function if the messaging feature has been enabled in the pabx for your MSN extension number.



Intercom

The intercom function allows you to establish an internal connection to another system telephone without the called system telephone having to accept the call actively (lift up handset, hands free calling/activate open listening). This is a call in which both parties can speak to one another.

As soon as the system telephone has accepted the intercom call, the connection is established. You will hear the connection is established and the connection is established as accepted the intercom call, the connection is established. You will hear the connection is established as accepted the intercom call, the connection is established. You will hear the connection is established as accepted the intercom call, the connection is established. You will hear the connection is established as a connection is established as a connection is established. You will hear the connection is established as a connection is established as a connection is established. You will hear the connection is established as a connection is established as a connection is established. You will hear the connection is established as a connection is established as a connection is established. The connection is established as a connection is esta

a brief acoustic tone before the actual intercom call begins. If one of the parties picks up the handset during an intercom call, the call becomes a standard type of call.

For an intercom call, enter the internal number of the party you wish to call. You also only need to enter the internal number with direct exchange line access. e.g. »22« instead of »*22«.

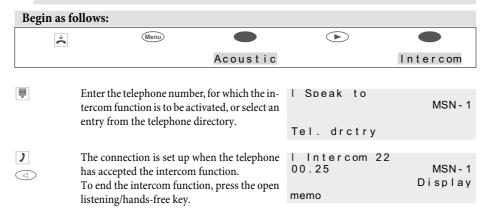
When an intercom call comes in for your system telephone, the number or the name of the calling party appears in the display. Intercom calls are preceded by a brief acoustic signal over the speaker. The intercom call can be terminated at any time by pressing the ESC key. Intercom calls are accepted automatically by activating the »Hands- free« feature when:

- the telephone is idle,
- the intercom feature has been enabled for the pabx (control by means of the »Enabling intercom« function key).
- the »Silent signalling «function is not activated.

Intercom calls can also be received even if the »Station guarding« function is active when the »Enable intercom calls« function key has been programmed and is activated.

You can initiate intercom calls using the following procedure, or using a programmed function key.

You can only utilize this function if the intercom feature for system telephones has been enabled in the pabx for your MSN extension number.



Automatic completion of call

Using the automatic completion of call to busy subscriber feature, you can reach a subscriber whose line is busy or who is not near his or her telephone. You are then notified that the subscriber for which recall has been configured can now be reached. You receive this information from the exchange office for external call-backs and from the PABX system for internal call-backs.

The telephone display then indicates »Au t om . callback «. This display alternates every 2 seconds between the number or name of the desired party. As soon as you accept this information (by picking up the handset, for example), the selected party is called automatically.

automatical recall to busy subscriber (CCBS)

You hear the busy signal when calling the extension of the person you are trying to reach. »Completion of call to busy subscriber« allows you to call the extension as soon as the other subscriber hangs up his or her telephone.

Automatic completion of calls on no reply (CCNR)

When you call the desired number you always get a ringing signal, but the party is not near the phone or does not answer. Using the function »Completion of call on no reply« you can reach the party immediately when he/she ends a call, or lifts and then replaces his/her handset.

Programming completion of call to busy subscriber



The »CIbckbusy « softkey is only displayed, when automatic completion of calls are possible with the exchange office or with the pabx. The features »Recall to busy subscriber « or »Recall on no answer « must be applied for at your service provider for external call-backs.

You can configure three call-backs at a time. If you are using an LCR procedure (e. g. the LCR procedure of the phone), the »Completion of call to busy subscriber« function is carried out automatically via your standard network service provider.

If automatic redialing is active, the »C I b c k b u s y « softkey is shown on the display. Press the right arrow button or the »Continue« softkey, to return to the normal idle state display.

Viewing and clearing call-back calls

When the phone is in idle, any call-back calls that are initiated can be viewed in the display by pressing the softkey »CIbckbusy«. Press this softkey to view the call-back calls. You can then view the individual completion calls using the arrow keys. If you wish to delete a call completion, select this call using the arrow key and then press the menu key, followed by the »delete?« softkey.

All completions of call are automatically deleted after a predefined period. This time is set by the service provider for external call-backs and by the PABX system for internal call-backs.

If the ISDN telephone is disconnected from the ISDN network, (for example by unplugging the ISDN connector of the phone or by switching off or resetting the pabx), all requested call completions will be lost.

Parking a call

The parking function allows you to interrupt a call for up to three minutes. You can then unplug the plug-in connector for your ISDN system telephone from the ISDN jack and plug it in in a different room. You can continue with the previous call after »unparking« it. Or you can »unpark« the call at a different phone and continue your call there.

Parking is only possible when only one connection is currently active with your telephone. After you unpark the call, the number for the parked subscriber will no longer be shown.

A »parking code« (0...99) is used to ensure that you are returned to the proper call when two calls are parked. The default parking code is 55.

If you park two calls on an ISDN bus this bus is then disabled for further calls. Unparking is possible only on the bus on which the call was also parked. Parking is only possible when only one connection is currently active with your telephone.

Park



Unparking



Tracing (MCID)

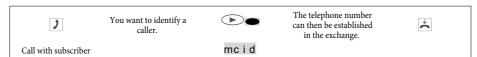
If you receive a prank or malicious call, you can arrange for the number of the caller to be saved at the exchange.

To enable this feature (Malicious call identification), it must first be applied for at your network service provider.

Identification of the caller is effected in the exchange and the number stored there with information on the number of the caller, the date and the time of the call.

You can use this feature in 2 situations.

Malicious call identification during ongoing call



After the caller has hung up the handset



You can initiate tracing only in the course of an ongoing call when you are conducting hands-free calling using the telephone.

Keypad and tone frequency dialing (DTMF dialing)

During an ongoing call you can take advantage of other features using keypad sequences or DTMF dialing. In the telephone configuration program you can set whetherecall flash buttonpad sequences or DTMF dialing is to be possible in the initial status of the telephone. The display indicates which other functions (keypad or DTMF) are possible.

»Keypad« softkey is displayed. DTMF sequences can be entered right away and keypad se-

quences only after you press this softkey.

»DTMF « softkey is displayed. keypad sequences can be entered right away and DTMF equen-

ces only after you press this softkey.

Keypad and DTMF sequences can also be stored for function keys, which can then be used during a call.

Keypad

Using the Keypad function you can manage service or features in the PABX system or in the network of the service provider by entering character strings and digit sequences via the keypad. Ask your network service provider about this and consult the manual for your PABX to determine whether "Keypad" is supported.



Tone dialing (dtmf dialing)

Using tone frequency dialing, you can transmit multifrequency signals (DTMF signals) during an ongoing call in order, for example, to poll your answering machine or for using mail systems. If call waiting is active for an ongoing connection, tone frequency suffix dialing can not be utilized.



Sie können einen anklopfenden Anrufer annehmen, ablehnen oder zu einem anderen Teilnehmer übergeben. Haben Sie bereits vier Verbindungen an Ihrem Telefon, können Sie nicht mehr vermitteln (übergeben).

Rückfrage

Sie können, während eines bestehenden Gespräches durch Rückfrage bis zu drei weitere Verbindungen aufbauen. Zum Einleiten einer Rückfrage-Verbindung können Sie auch die MSN-Belegungs-Taste, eine Linien- oder Leitungstaste nutzen.



Conducting calls with several subscribers

Call waiting

If, during an ongoing call, a second call comes in for you, the second call is signaled when "Call waiting on" is set (see page 65).



You can take a waiting caller, reject the call, or switch to a different subscriber. You can not transfer any calls if you already have four calls on your phone.

Transferring a call to a busy subscriber

This performance feature is possible when only one call is on hold. You would like to transfer a system-parked inquiry call to a busy subscriber.



The subscriber on hold will hear Music on Hold. As soon as subscriber 2 hangs up, he/she will be recalled by subscriber 1.

Call switching

When a call is transferred, the active subscriber and the subscriber for the connection previously put on hold are always connected with one another.

You can initiate an inquiriy call yourself (e.g. in order to announce the call) and can then transfer the call.



Please note that the feature (ECT - Explicit Call Transfer) must be supported by the PABX system when transferring two (2) external calls, or, when you use your phone directly on the network termination unit, by your network service provider.

Conducting calls with several subscribers

Broker's call

If you have more than one connection active at your telephone (call waiting or inquiriy call) (max. of four connections), you can talk to these parties alternately (Broker's call). For this, there are up to four softkeys available, depending on the number of connections on hold (»conn1«,...»conn4«). If the number or the name of the other party is known, the associated name or number is shown in the display instead of the text »Connection«.



If you have configured extension and line keys you can also carry out Broker's calls between different callers using these keys.

To terminate an active connection, press the disconnect key. You are then returned to the call that was previously put on hold.

You have the option of configuring up to four »Connection keys« in addition to the softkeys for the system telephone or the additional keypad.In connection with the associated LEDs, this keys show the communication status (no connection, ongoing connection, call status).

Three-party conference

If you have an active connection and a connection on hold at your system telephone, you can initiate a conference call with these two subscribers. All three subscribers can speak to one another. Conference calls are not possible with more than two (2) connections at your phone.



To end the three-party conference, press the softkey » return_to_«. You are reconnected with the subscriber of the last previous active connection. The other subscriber is put on hold.

telephone directory

You can store up to 250 names and numbers in the telephone directory. To select a name, you can page through the directory using the arrow buttons, or enter the specific first letter(s) of the name using the push-button set.

If the name of the caller is to be shown in the display instead of the caller's number, this number must be entered in the telephone directory with that name. The telephone number must be stored with the area code and with the line access digit when using with a PABX system. Display of the caller name is only made when the transmitted number corresponds to the number stored in the phone directory.

If the telephone is disconnected from the ISDN network and then reconnected, or if the data for the telephone directory are transferred to the system telephone via the PC program, the directory must be reorganized internally. This process takes place automatically and may require a few minutes. During this time, the telephone directory of your telephone is not available for use.

Settings for telephone book entries

Name and number

Each telephone book entry consists of a name (20 characters max.) and a number (26 digits max.). The assignments for the keypad for entering letters, digits and special characters are described on page 12.

Outgoing number (MSN assignment)

You can assign a number (»MSN - 1« ... »MSN - 10«) to each entry (MSN) that is to be transferred to the party being called for outgoing calls. To set up a connection with this MSN prefix first dial the number in the telephone directory in call preparation and then lift up the handset of your phone. If you establish a connection using an MSN assignment key the number (MSN) for this key is displayed at the party you are calling.

To define the number(»MSN - 1« ...»MSN - 10«), that is to be displayed at the party being called, use the telephone directory program on the WIN-Tools CD. If you do not assign a number to an entry, or assign an incorrect number (one that is not in the phone directory), the first number entered for the telephone is transferred (»MSN - 1«).

Special dial tone (VIP-Tonruf)

You can program a special dial tone and for each entry and set the volume separately. A call is signaled using the set special ringing tone when the caller also transmits the corresponding number. This special ringing tone will then have priority over the ringing tone assigned to the selected MSN.

Infotext

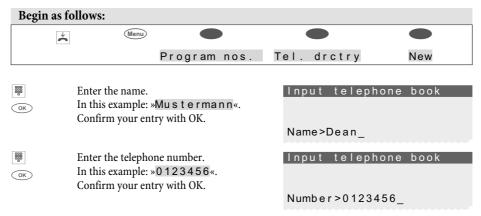
You can store an info text for each entry. The information text is displayed when:

• a telephone directory entry had been selected in call preparation using the OK key.

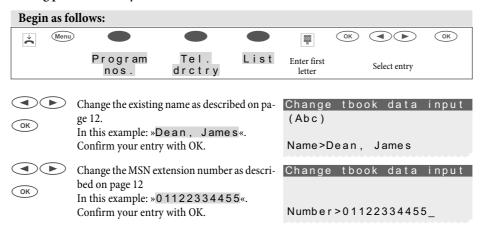
- when a call is signaled and the softkey » Info« is pressed.
- During a connection when the softkey »Display « is pressed.

The info text length is restricted to 42 characters. The assignments for the keypad for entering letters, digits and special characters are described on page 12.

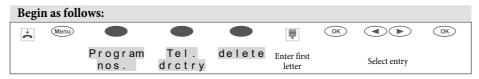
Add an entry to the telephone directory



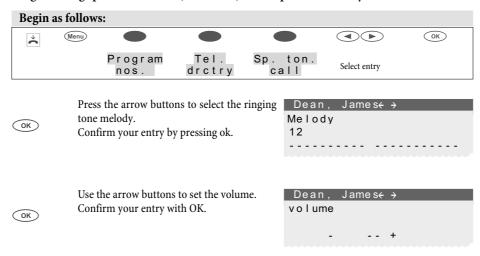
Editing phone directory entries



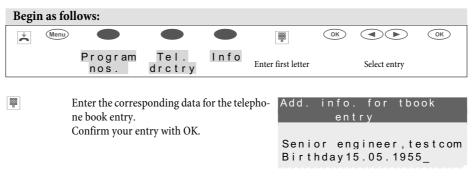
Deleting a phone directory entry



Programming special dial tones (VIP-tones) for telephone directory entries



Programming an info text for a telephone book entry

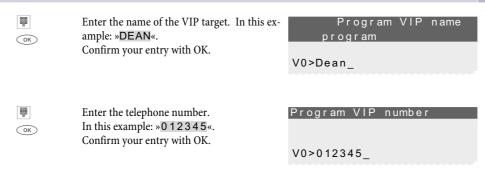


VIP-Memory

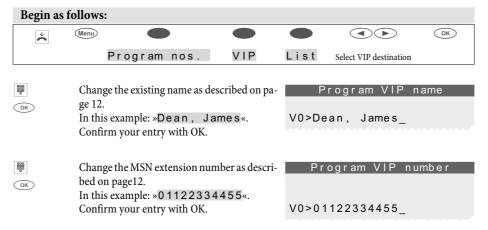
You can program VIP numbers for each of the ten dial buttons $1\dots 0$ including a name (20 characters max.) and a telephone number (26 digits max.

Programming VIP entries





Editing VIP entries



Caller- and Memo list

The phone has a combined caller and memo list. A maximum of 30 entries (calls, memos SMS messages or UUS1- messages) are stored in this list. Entries in the caller or memo list are indicated by the »Ca I I e r I i s t « softkey. You always have the most current entries in the list. The most recent entry is displayed first.

When you press this softkey the number of new entries is shown on the display (for example: 4!%) und die Quantity der neuen SMS- or UUS1-Messages (FOR EXAMPLE.: »Messages: 2%).

Also shown in front of each entry is the number for that entry in the list and the total number of all entries in the list.

FOR EXAMPLE.: »3/10: 1122334455.... *«.

If the number in this entry is identical to a number in the telephone directory (phone directory of the telephone or the pabx) the name is displayed instead of the number. You can also view the time and the date of each entry as well as information (if applicable) about it. If you lift up the handset of your phone while you are viewing an entry in the list, that caller is then called automatically. Single entries can be selected for deletion.

Caller list

Calls that you do not accept, or that you specifically refuse, are stored in the caller list. When a call is made with a subscriber from the caller list (you call or you are called), the entry is automatically deleted and transferred into the redial memory.

Memo list

You can store a telephone number under a scratchpad memo. You can not input letters or any other special characters. When a call is made with a subscriber from the scratchpad list (you call or you are called), the entry is automatically deleted and transferred into the redial memory.

You can enter a memo during a call or in the idle state. The following entries in the list are possible:

- Manual entry.
- Telephone number from short dialing memory.
- Telephone number from directory.
- Telephone number from direct dialing memory (Function keys).
- Number from the redialing memory.

SMS / UUS1 messages

When you receive a new message the number of messages you have received up to that time is displayed when the telephone is in the idle state. The phone number, or the name of the party who sent the message, and information about the type of message (SMS or UUS1) are shown in the caller list. When you press the menu key you can read the received message immediately, or save it in the list of SMS or UUS1 messages for reading at a later time.

After you view a new message that is located in the list of saved UUS1 or SMS messages, that message is then deleted from the caller list.

UUS1 Inhibiting filter

Use the Professional Configurator or the system telephone to inhibit or enable reception of internal and external UUS1 messages. MWI - Message Waiting Indication (e.g. T-NetBox).

The T-NetBox is an answering machine that can be provided within networks of the Deutsche Telekom AG, T-Com (German Telecom, T-Com). With the performance feature MWI (Message Waiting Indication) active you will be notified when a new message is received by your T-NetBox.

The notification is stored as an entry in the caller list. By selecting the entry and lifting the handset you can set up a connection to your T-NetBox to listen to the new message for example. The entry in the caller list is deleted automatically if no new messages are present, for example at your T-NetBox. You can also delete the entry manually.

You can only use this function when your ISDN connection and your phone system support the MWI performance feature.

Viewing the caller list



The telephone is idle. The softkey »Caller is t «in the lower row of the display indicates that an entry is present in the list. Press this softkey.



The bottom lines show the entries available in the caller list. The active entry (the one you have selected with the arrow buttons) is highlighted.



The upper display lines show the type of entry (»Call«,»Memo«,»UUS«,»SMS«), the date (for the first two days »Today« or »Yesterday«), the time and the dialed extension (msn).

- » * « New call, UUS1- or SMS-Textnachricht
- »r« Call »n« Display
- » i « Call ignored by call filter
- » I « Information about new messages, for example in your T-Netbox (MWI)

When you view the caller list again, entries that you have already viewed but not deleted are no longer marked by * " on the display, but rather by * r «.

You can view other entries using the arrow buttons.



Further information about a call / memo



If you wish to view more information about the entry, select the entry using the arrow key and then press the menu button.

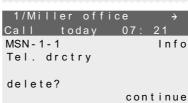




Menu

You can delete the phone number, import it into your telephone directory, or view further information about the selected entry.

You may want to press the softkey » i n f o « for example.



The display now shows information about the 1/Miller office call. If not all information fit into the screen, use the arrow keys to display more. Press the C-button to leave the menu. You can

then use any one of the other options.

0123456789 to MSN-1 (& MSN-2) 07: 21 Call today (2 x Call)

»delete?« The entry is removed immediately.

» i n f o « Viewing further information about the call.

> FOR EXAMPLE.: The MSN extension number to which the message was sent and the telephone number of the sender.

» TeI. drctry «Entering the number of the caller in the phone book of the phone.

»continue« Viewing the next entry in the caller list.

Further information about a text message (SMS / UUS1)

Menu

If you wish to view more information about UUS the entry, select the entry using the arrow key and then press the menu button.

Yesterday 15:24 msn-5 5/09:112233445566 n 6/09:Sales



Press the softkey » r e a d «. Note: Press the right arrow button to have the »TeI. drctry « softkey displayed.

UUS msn-5 Info read Save delete? continue

The arrow (*** «) in the top row indicates an * UUS 01/03 incoming text message.

Sales Thanks! Let's meet at 15. 30



If the message is not displayed completely press the arrow keys to view the rest of the



Press ok if you have finished reading. You can then use any one of the other options.

»save«

Saving the message in the corresponding list of messages and deleting the entry in the caller list.

»delete?«

The message is deleted immediately and added to a list of messages.

»info«

Viewing further information about the message.

FOR EXAMPLE: The MSN extension number to which the message was sent and the telephone number of the sender.

- » Tel. drctry « Entering the number of the caller in the phone book of the phone.
- »continue« Viewing the next entry in the caller list.

Deleting the caller / memo list

Deleting an entry

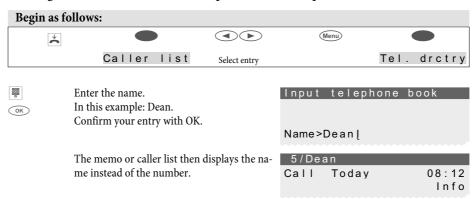


Deleting all calls

You can delete all entries of the caller / memo list simultaneously. Text messages you have received (SMS / UUS1) will not be deleted.



Entering the number of the caller in the phone book of the phone



Entering a memo

You can add a memo number from:

- the telephone's phone directory (»TeI. drctry«)
- the direct dialing memory / function keys (» d i r e c t « softkey)
- the VIP memory (»VIP« softkey)
- the redial list (» r e d i a I « softkey or redial button)
- or add a new number manually (»new« softkey).

The following example describes how to add a new number as a memo.



SMS and UUS1 text messages

With this phone you can send and receive SMS or UUS1 messages (SMS - Short Message Service, UUS1 - User to User Signalling). You can input a text message using the keypad on the phone. The assignments for the keypad for entering letters, digits and special characters are described on page 12.

Sending and receiving of text messages is only possible when the sender has his/her number transmitted to the receiving party, where it is also displayed. This is why text messages are not transmitted, or not displayed on the telephone, when the phone number is not transmitted with the message.

An incoming text message is signaled by two brief acoustic tones in the phone. If the phone is idle, the number of messages received is displayed, along with information about these messages in the caller list.

SMS Text Messages (subject to terms of network provider)

SMS allows you to send and receive text messages to/from other phones in a fixed-line network or to/from cell phones. An SMS is restricted to 160 characters, Up to 4 SMS messages with 612 characters can be linked automatically. A softkey confirmation is required to switch from one SMS to the next.

Sending/Receiving of SMS messages is only possible:

- When you use this telephone with a system telephony pabx system that supports the SMS feature.
- When you have registered this feature at your network service provider, or the provider of the SMS center for your ISDN connection.
- When the phone number for the SMS center is stored in the telephone.

Consult the provider of the SMS center that has been configured to establish in which networks (fixed-line or mobile communication network) SMS messages can be sent and the costs for sending and receiving SMS messages. This telephone does not support the transmission of SMS messages with special content (for example images, audio).

The telephone stores all SMS messages you have received or sent in two separate lists. Up to 10 sent and 10 received SMS messages can be stored. You can save a maximum of 5 linked SMS (regardless of whether they are double or quadruple linked). Phones that do not support linked SMSs receive these as individual SMSS messages.

Please not that free storage space must be available to receive SMS messages. You can not receive any further SMS text messages if you already have 10 SMS messages stored.

SMS messages you have sent can be stored in a list. When this list is full the SMS that was sent last is stored temporarily.

UUS1 text messages

You can send text messages from one telephone to another without having to call that particular subscriber. UUS1 text messages are limited to 31 characters.

UUS1 text messages can also be sent to internal and external telephones. You can only use this feature with external telephones if »UUS1 (User to User Signaling)« has been applied for (and approved) for your ISDN connection.

Note that all terminal devices that are used (telephones, pabx systems) must support the feature »UUS1 (User to User Signaling)«.

The telephone stores all UUS1 messages you have received or sent in two separate lists. Up to 10 received an 10 sent UUS1 messages can be stored.

Please not that free storage space must be available to receive UUS1 text messages. You can not receive any further UUS1 text messages if you already have 10 UUUS1 messages stored.

UUS1 messages you have sent can be stored in a list. When this list is full the UUS1 text message that was sent last is stored temporarily.

Creating and sending text messages Creating and sending text messages

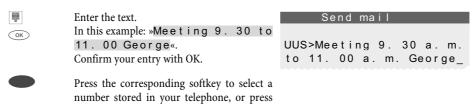
You can send a text message to a number stored in your telephone (telephone directory, VIP memory or direct dialing memory), or input a new number for sending. To do this, press the corresponding softkey in the menu »Send mail»Tell. drctry«, Disp3xx>direct«, Disp3xx>VIP«, Disp3xx>New« or »Redialing«.

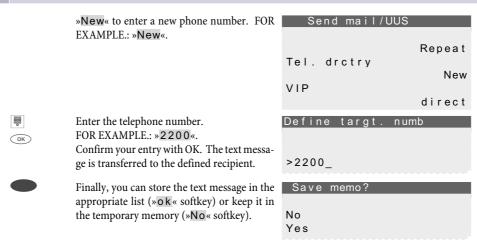
To select a number assigned to a function key (» direct «) or stored under the redial button, you can also press that corresponding key.

When sending text messages the first number (»MSN - 1«) entered in the telephone or the number specified by means of the userecall flash button are transmitted with the message.



Example: Creating a UUS1 text message





Important notes for entering numbers with SMS transmission

If the »Direct exchange line access« feature is switched off for your telephone, then you must enter the line access digit before the target number. The line access digit must be stored in the telephone. When the telephone is connected to a pabx for which direct exchange line acces has been programmed, the you can dial the target number directly.

Sending an interlaced SMS

You can link up to 4 SMS together. A counter in the display indicates the remaining space available for characters. At the end of the first mail a query is made asking whether a linked mail is to be sent. If you replay with Yes, a message is then shown indicating the remaining free space; if you answer with No, the input of the last character is ignored and the SMS is sent as described for non-linked SMSs.

In the example shown here » 451 available « indicates the remaining space for characters still available, 1/2 denotes that 1 is the first SMS block, of 2. You can move between the blocks using the arrow key. If no space is available for saving a linked SMS, the message will only be stored temporarily.

Send mail						
451	free	1 /	2	(Ab	c)	
You	can I	ink ι	ıp	t o	4	
SMS	messa	ges				
toge	ether.	Асс	un	ter		
in i	the di	splay	s	рас	е	
ind	icates	the	r e	ma i	ning	
ava	ilable	for	сh	ara	cter	

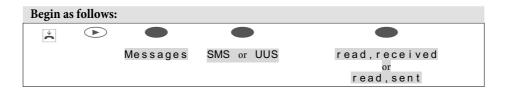
Viewing newly received text messages

A new message can be displayed from the caller list (see page 32) or from the received text messages list. Once you have read a message from the list of temporarily stored text messages, it is deleted from the caller list.

Viewing received or sent text messages

The following features are available when viewing temporarily stored text messages:

- Resending a text message.
 You can edit a text message before actually resending it.
- Deleting a text message.
- Entering the number, to which the text message was sent or from which it was received into the telephones directory.
- Putting a text message into the list of permanently stored messages (UUS1 only).



Example: Reading a received UUS1 message

The most recently added text message is displayed first. A new, unread text message is marked with an »* «. The following information can be displayed for a text message:

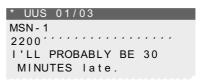
- Nmber of the text message in the list (in this example: "0 1 / 03").
- Received (» «) or sent (» «) text message (in this example: » «).
- Number, for which the text message was sent (in this example: »ms n 1«).
- Number of the sender / receiver (in this example: » 2200 «).



Press the arrow keys to view the entire text messages. * UUS 01/03

Press OK to access the next menu with further options.

In the upper row of the display you see the date and the time, when you received the message. To select an action, press the corresponding softkey.





» send« Editing and then sending the text message.

To send the text message, please proceed as described for »Creating and sending text

messages.

» deleting a text message.

»Tel. drctry, «If you wish the sender's or receiver's number stored in the telephone directory, press the right arrow button and then the » Te I . drctry « softkey. Enter the name for the phone book entry and confirm by pressing OK.

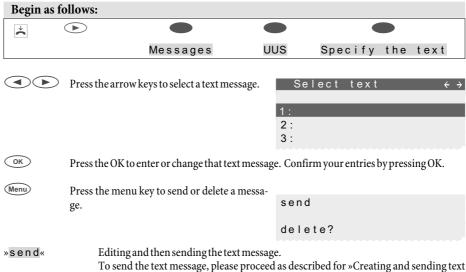
Viewing the next temporarily stored text message. »continue«

»Text Save« (UUS1 only)

Moving the text message to the list of permanently stored message. To do this, use the arrow key to select the storage location and confirm by pressing OK.

Permanently stored text messages (UUS1 only)

You can store up to five UUS1 text messages permanently in your telephone. You can then edit, delete or send these text messages. You can only input these messages directly into your telephone.



messages« (see page page page page page page page.

»delete?« Deleting a text message.

Automatic sending of text messages (UUS1 only)

You can send a UUS1 text message automatically to a caller. For this, message 1 in the list of permanently stored messages is used.



te/deactivate automatic sending of messages. » Incoming ~ «: automatic sending active.

»Incoming«: automatic sending not
active.

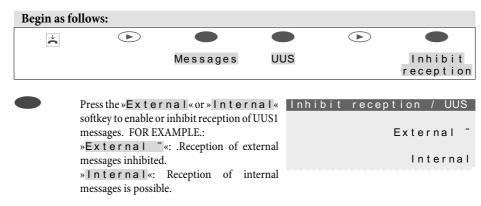
Incoming ~

Inhibit reception

Configuring the text message reception mode (UUS1 only)

You can program your telephone for external or internal UUS1 text message reception. Reception of external and internal text messages can be inhibited separately. You can program the telephone directory in such a way that specific text messages can be received.

If you have disabled reception, external or internal text messages can only be received when the sender's phone number has been stored in the phone book with a special call signal.



Error when sending or receiving an SMS

Error while sending an SMS

A corresponding error code is displayed in the event that for some unseen reason it is not possible to transmit an SMS. Contact the SMS Service center of your network service provider / carrier to find out which error codes are displayed.

Error while receiving an SMS

 $There \, may \, be \, various \, reasons \, for \, it \, not \, being \, possible \, to \, receive \, an \, SMS, \, or \, for \, only \, having \, voice \, output: \, in the property of the pr$

- The feature SMS has not been applied for (and approved) at your network service provider and/or the provider of the SMS Service Center.
- The SMS has been transferred by outside service providers which did not transmit this message as an SMS.
- Permanent number suppression (inhibit) is activated for your ISDN connection.
- Ten SMS messages have already been stored in your telephone, preventing any further SMS messages from being received.

Silent signalling

If you do not wish calls to be signaled with the programmed ringer melody and volume, you can active the »Silent signalling« feature. Depending on the specific setting, all calls will be displayed optically or along with a brief acoustic signal. To set the volume for the brief acoustic signal, proceed as described on page « or »R« in the display shows that the function »Station guarding« is activated.

»no« The function »Station guarding« is deactivated.

»ok, tone of f « Calls are signaled optically only (»R« shown in the display).

»yes, with notice signales lare signaled first by a brief acoustic signal and then only optically

(» r «).

On ly for msn-1 The functions described above are configured only for MSN-1. This as-

sumes that several MSNs have been configured in the system telephone.



Monitoring costs

You have the option of logging the accrued communication costs for your telephone. You must apply for this feature to your network service provider.

Ask your service provider on the possibilities of charge data transmission. Please note that transfer of all cost information from the exchange office to your telephone may not always be possible for technical reasons. Any price reductions and special rates or convenience features utilized may result in differences between the data stored in the telephone and information listed in the phone bill.

Procedures for charge rate transmission

There are several standardized procedures for transmitting call charge rates. Usually the same procedure is employed at one connection that is recognized and stored automatically for future use by the telephone.

In the event that the type of charge information transmission is not stored in the phone, "Wrong charge type "then appears in the display.

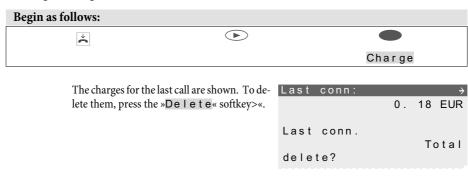
In this case you should delete all charge information stored in the telephone (see also: viewing/deleting total costs). Recognition and saving of the procedure that is used for transfer of cost information is then re-activated.

You can set the tariff factor and the currency while configuring your telephone with the PC.

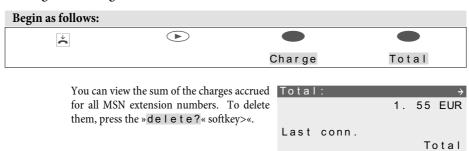
Viewing and deleting costs

If you have implemented PIN protection for your phone's configuration (see page 72), clearing of the charge rate accounts is also PIN protected. After pressing the softkey »delete?« you then need to enter the PIN. You can also delete communication charges using the Professional Configurator.

Viewing/deleting costs for the last call



Viewing and deleting total costs



If the sum of the costs is deleted, all MSN cost accounts are also deleted simultaneously and recognition and saving of the procedure that is used for transfer of cost information is then re-activated.

delete?

Viewing/deleting costs for specific extension numbers (MSN)



You can view the sum of the charges accrued for a particular MSN extension number. In this example for »MSN - 2«.





To delete the total costs for the selected extension number (in this example MSN-2), press the left arrow button and then the »delet e?« softkey.



Setting the tariff factor and the currency



»Charge« Enter the new charge factor and confirm your entry by clicking »OK«. The charge factor length is restricted to 4 characters. To enter a comma, use the asterisk key.

»Currency« Enter the new currency and confirm your entry by pressing OK. The currency name is restricted to 6 characters. The assignments for the keypad for entering letters, digits and special characters are described on page 12.

»delete?« All charge data stored in the telephone are deleted. Recognition and saving of the pro $cedure \ that \ is \ used \ for \ transfer \ of \ cost \ information \ (see \ page \ 43) \ is \ then \ re-activated.$

Programming a charge limit for an extension number

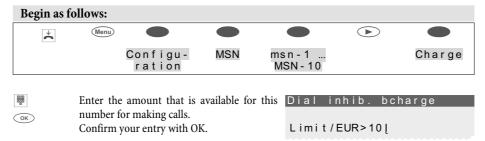
You can set up a charge account for each number (MSN) that has been entered in the telephone. An amount in the configured currency that is available for making calls will then be allocated to this account for the defined number (MSN). Once this amount has been exhausted, only free-of-charge calls can be directed for this MSN extension number. When you have programmed specific dial ranges for this telephone, calls with costs can be directed to the unrestricted numbers.

If this limit is reached during an ongoing call, the call can be completed.

When the amount for the account is increased, or when the accrued charges are cleared calls with costs can again be made.

Attention: Not all service providers transfer charge rate information. If you make calls using a service provider which does not transmit charge information, the charge account is ineffectual.

Configuration of a charge account for a phone number (MSN) is described below using MSN1 as the example



If you enter the amount available for making calls as »O«, the charge account is not activated.

Enabling or inhibiting an extension number (MSN) for outgoing calls

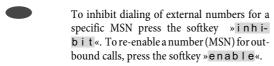
Each number stored in the phone (»MSN - 1« ... »MSN - 10«) can be enabled or inhibited separately for outbound calls. If you have inhibited an MSN for outgoing calls, no outgoing calls can be initiated through this number (e. g. MSN assignment via function key). Incoming calls can continue to be received by this number.

If you attempt to set up a call using a number that has been inhibited for dialing, the following message is shown in the display " In " i

Enabling or inhibiting of a number for outgoing calls is protected by an MSN-specific PIN. You must enter this PIN in advance during configuration of the number (MSN). After that, you can inhibit or enable dialing of external numbers (outgoing calls) for this MSN.



A check mark displayed next to the individual softkeys indicates the current status.





Communication and charge displays

The following displays are possible during a call:

Call display for phone number (»0123456«).

0123456	
	MSN - 1
	memo
Display	

Displays during an ongoing call	0123456	
(»0123456«) and time (»07: 41«).	07:41 MS	SN - 1
	N	/lemo
	Display	
	Bropius	
Displays during an ongoing call	0123456	
(»0123456«) and duration (»32. 43«) of the call. For		SN - 1
example, the duration of a call can be displayed for all inco-	020	
	•	nemo
ming connections or when there are no charge data	Display	
available.		
Displays during an angaing call	0123456	
Displays during an ongoing call		
(»0123456«) and charges (»0. 36 EUR«).	0.36 EUR MS	SN - 1
	n	nemo
	Display-	
Call display for date (»29.05.03«) and time (»07:	29.05.03	→
41«).	07:41 MS	SN - 1
	n	nemo
	Display	
	2.07.07	
Correct charge display is shown only if you have applied	ed at your network service provider for	r
transmission of charges during calls.	and the first the provider to	
transmission of charges during cans.		

Displaying information during a call

The displays during calls described below depend on your individual settings and can therefore be different for each connection. Correct charge display is shown only if you have applied at your network service provider for transmission of charges during calls.

)	During a call, the upper rows of the display
	show the number or the name of the other
	party (\times TONY \times) and the duration of the entire call (\times 02. 43 \times).
	,
	Press the »d i splay« softkey.
	37 41 1 41 . 6 4 1

You are then shown other information availa-
ble on the current connection.
Date (»29.05.03«), Time (»07:41«),
associated number (»0987654321«),
Costs (» 0. 36 EUR «), duration of the call
(»02.55«)

Display	keypad
Mic. muted	parking
TONY	
to MSN-1	
29.05.03 07:41 0987654321	
0,36 EUR	02.55

MSN - 1 memo

BEATRICE 02.43

Press the arrow key to display further information (if available). If you are the destination of call rerouting, you will be shown the number that is being rerouted (»U \leftarrow 123 $^{\circ}$), when it is transferred.

 $\stackrel{\bigstar}{\smile}$

You see the normal display again during a connection.

BEATRICE 03.33

03:33

memo

Display

After finishing the call you see for about 5 seconds the following display.

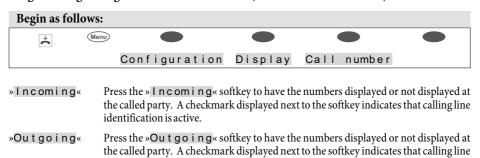
TONY

Costs

0.36 EUR

Programming calling line identification mode (CLIP/CLIR/COLP/COLR)

identification is active.



System telephony

The system telephone is designed for being connected to the internal ISDN connection of pabx systems.

When operated at these pabx systems, your telephone offers you a variety of typical features. For example:

- Dialing from the pabx telephone directory (see page 16).
- Message and Intercom (see page 22, 22).
- Special function keys (see page 49).
- Access to the system menu of the pabx (see page 55).

Please refer to the operating instructions of your PABX to determine whether these typical system features are provided with this particular telephone.

Function keys

The system telephone is equipped with five function keys, which you can program on two levels with different functions.

Each key is equipped with two-color LED that can be used to display the active function. Each color is assigned to a particular level for the function key.

Function key examples

Direct dialing buttons (see page 16)

DTMF/ keypad sequences (see page 26)

Defining the MSN extension number for the next call (MSN assignment)

You can conduct an internal or external call such that a defined number (MSN) is transferred from your telephone to the party you are calling. This number must have been entered previously in your telephone.

Line keys

A B channel for an external ISDN connection is configured for a line key. When this key is pressed, hands-free calling is activated automatically and the corresponding B channel of the ISDN connection is accessed. You will hear the external dial tone.

If an external call is signaled at a different in-house telephone you can accept this call by pressing the line key.

Trunk group buttons

If several ISDN ports can be compiled to form trunk groups you can assign them to one trunk group key. When this key is pressed, hands-free calling is activated automatically and the corresponding B channel of the ISDN trunk group is accessed. You will hear the external dial tone.

System telephony

Extension keys

You can configure dialing to an internal extension using an extension key. When the corresponding key is pressed hands-free calling is activated and the listed subscriber called.

If a call for the listed subscriber is signaled you can accept the call by pressing the extension key. Waiting calls are indicated by flickering of the line key LED. The call can be picked up by any member within the group just by pressing the key.

Connection keys

Function keys at the system telephone or expansion can be configured in addition to the softkeys »Call 1.. « for executing broker's calls. In this case, two to four of these keys must be configured.

- No other keys may be configured between connection keys.
- The number of possible connections depends on the number of connection keys that are configured. If fewer than four (4) keys are configured, the functions Call waiting and Inquiry call are only available in a limited scope.
- If several connections are »Idle «, the call signaled first is picked up when the handset is lifted.
- If several connection keys are available, the corresponding connection key can be used to select the
 call to be picked up when several calls are waiting. Note here however that only one ISDN system telephone should be operated at the ISDN port, and that only simple call waiting is configured. Only
 then is it possible to give preference to a second waiting call over an ongoing call (both callers require
 one B channel each).
- If a call is now signaled, a further connection can be set up without lifting the handset using a further connection key.
- Broker's calls can be executed using the connection keys.
- Allocation of a connection, or of a call, is retained until the call or connection is ended, in contrast to the softkeys »Connection 1..«.
- A connection can be set up using a connection key and then pressing a line key.
- During an ongoing call it is possible to set up a further connection by pressing the connection key.
- Pressing the terminating key discontinues the current connection and the connection with the last call that was on hold.
- If you wish to connect an ongoing call with one that is on hold you must click the softkey »Transfer«
 and then press the connection key for the call that is on hold.

»System-parked inquiry« button

The called subscriber uses the system-parked inquiriy call feature to dial the default numeric code. The telephone is now available for other uses, for example an announcement or message. A different subscriber can accept the call when he/she lifts the handset and dials the corresponding number for the call on hold. The code numbers given by the PABX system can also be entered in the function keys for one or several system telephones. If a call is placed in the Parked inquiry queue by pressing a function key, this is indicated by the LEDs of the function keys flashing at the system telephones configured for this feature. The call can be picked up by pressing the corresponding function key. This performance feature is possible when only one call is on hold.

Team keys

A team key is a normal line key to which the internal number for a team is assigned. When the corresponding key is pressed hands-free calling is activated and the listed team called.

If a call for the listed team is signaled you can accept the call by pressing the team key.

Team log-on/off

If you are entered as a subscriber in the call switching modes of one or more teams you can configure a key so as to control the call signaling of your telephone. When you are logged in, team calls will be signaled at your telephone. No team calls are signaled at your phone if you are not logged in.

Day/ Night modes

You can configure a key so that you can switch between the call switching modes of the PABX (Day/Night modes) when that key is pressed. The pabx uses call modes for signaling team or door terminal calls, for example.

Announcement (see page 22)

Message enable on/off

You can also explicitly inhibit or enable receiving of messages using a corresponding function key.

Intercom (see page 22)

Intercom enable on/off

You can also explicitly inhibit or enable receiving of intercom calls using a corresponding function key.

Boss/Sec.-function

This function enables the interaction between the phones of the secretary and the boss. Here, a special extension key with the number of the boss phone is assigned to the secretary phone, and one with the number of the secretary phone assigned to the boss phone.

Xfer secretary

In conjunction with a configured »Boss key« you can use this key to determine whether calls are to be put through directly to the boss, or whether they are to be signaled in the secretary's office.

Call filter

The call filter allows you to explicitly reject or forward calls to your system telephone. A rejected call is given a busy signal and is stored in the caller list with a special flag. You can configure the call filter using PC Configuration for the system telephone and activate or de-activate the filter using this function key.

Call rerouting

You can configure a button such that call rerouting is set up for a specific extension number (MSN) of your phone. Press this button to activate or deactive call forwarding (see page 63).

System telephony

Direct dial-in

Direct dial-in from the telephone can be configured via programmed function keys. The direct call number must be stored in the telephone before direct calling via a function key can be programmed. Deactivation of direct calls is carried out as described in the section »Direct call« (see page 63).

Headset on/off

If you have a headset connected to your telephone and ready configured, you can operate it by means of a function key. In the factory default setting, buttons 4 (headset) and 5 (auto-answer) are programmed for this.

Press the headset key to initiate, accept or end a call.

Auto-Answer

Your telephone can accept calls automatically, without you having to lift the handset or press the speaker-ecall flash button. The time interval, after which a call is automatically answered, is programmed during telephone configuration with the PC. The auto-answer feature is activated and deactivated by means of dedicated function key.

Extension key for an answering machine

This key is a special line key to which the internal number for the answering machine is assigned. A DTMF sequence can also be assigned to this key.

When you press this key the number of the answering machine is dialed and the stored DTMF sequence then transmitted. 0000, MSN enabled for dialing When the answering machine is called the speaker is activated, but the microphone remains switched off. You can also accept a call signaled at the answering machine by pressing this key.

Voice Mail-Button

If you are using a voice mail system at the PABX to which your phone is connected (for instance a Discofone voice mail system) you can also configure a button for controlling voice mail functions. You can then set up a connection to your voice mail box by pressing this button.

User on/off button (sertaste ein/aus (programming the system telephone's MSN extension number)

Normally, the first number entered in the telephone (MSN-1) is used as the default number for all settings and actions. You can set the default number for your telephone using the Userecall flash button. When you press this key the default number for the telephone is changed to the corresponding phone number (MSN). The changed default number is then used when you initiate a call and when you send SMS or UUS messages.

Status info button

Status info / record

This button can be configured as »Router button« (code 01) or »Recording button« (code 02).

Router button (01)

If you have configured a status information key you can terminate ongoing Internet connections and set up new ones using the provider entered in the configuration data at the click of a button. The function key LED indicates the status of an Internet connection (LED off: No connection, LED on: Connection via WAN).

Recording button (02)

(Only if this function is supported by the PABX system) When you press the Log key during an ongoing call, the log function is then activated (LED lights up).

Macro functions

You can configure the existing function keys of your telephone as self-programmed function keys. These self-programmed functions are called macro functions (macros). Macros allow you to save set routines and assign them to a specific function key. For example, you can save frequently used codes for your PABX system or specific routine actions as a macro and call it up at a later time by pressing the corresponding function key.

LED functions

Function key / LED	lit	flashes	flickers
Line key Chef-sec-Tasten	Connection	Connection on hold	Incoming call
Xfer secretary	Calls are rerouted from the boss phone to the secretary.		
System parked inqui- riy		Conversation held in a system-parked inquiry	
Extension key	Connection	Connection on hold	Incoming call / Call waiting
Team key			Incoming call
Trunk group button	no B-channel available		Incoming call
Extension key AM Connection with AM/		AM holds active con- nection with caller	Incoming answering machine call
Voice Mail key	Voice Box	New messages availa- ble	

Function key / LED	lit	not lit
MSN assignment	connection established by means of the key	
Team function log-on/log-off	logged in	logged out
Day/ night mode	Night active	day active
Announcement	own message	

System telephony

Message enable on/off	enabled	inhibited	
Intercom	own intercom		
intercom enable on/off	enabled	inhibited	
Call filter	active	off	
Call rerouting	active	not active	
Direct dial-in	active	not active	
Headset on/off	Connection or connection establishment	no connection	
Status info button (01)	Connection active	no WAN connection	
Auto-Answer	active	not active	
Userecall flash button	modified number	default number	

Function key / LED	lit	flashes	flickers	not lit
Connection keys	Existing connection	Connection being put on hold	Call status	No connection

Each function key with automatic LED functions (e. g. extension keys, line keys) may only be programmed one time for each system (telephone and key expansion module).

Programming a function key

Programming of the function keys is effected during configuration of the system telephone with the PC. You can program the five function keys on two levels with different functions.

Using the function key

Press the corresponding function key. The function assigned to this key is executed. An LED associated with this particular function is switched on or off accordingly.

Press the key two times to reach the second level for the function keys. This must be executed at a short interval.

Important notes for LED functions

The status of the LEDs is not updated permanently in the system telephone. The status of the LEDs is not changed when these functions are changed or switched using a code or PC configuration for the PABX system. If the telephone is disconnected from the ISDN network (for example for Parking of a call) the LEDs will be off when the system telephone is plugged in again.

The display for the assigned LED is changed and the corresponding feature activated/de-activated in the PABX system when you press a function key.

System telephony

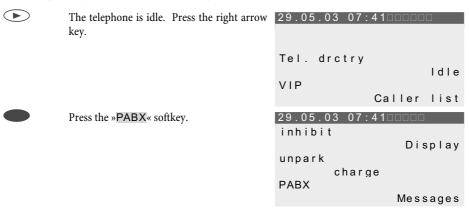
Example: You activate the message to your system telephone using the function key and someone else de-activates the announcement via the PABX system PC configuration. When you press the function key you also de-activate the message and the assigned LED is switched accordingly.

System menu at a pabx with system telephony

The system telephone is designed for being connected to the internal ISDN connection of pabx systems. These devices provide a special menu with further system-specific functions. This menu and the features that it contains are managed entirely in the PABX.

Simply press the »PABX menu« softkey to access the system menu.

Accessing the system menu for PABX systems



The description of the menu and the features which are available to you in this menu are given in the operating instructions for your PABX system.

Extended configuration

For a full configuration the following options are available:

- PC-configuration using the telephone's USB-port
- Configuration using the internal ISDN port of a PABX.
- Extended configuration directly at the phone You must enter a code before you can access the extended configuration mode.

Only limited configuration is possible when the telephone is recognized as a system telephone when connected to an System PABX system. You have to enter a specific code number in order to enter the telephone's extended configuration mode.

If the telephone is not recognized as a system telephone (for example when connected to the NTBA or at an internal ISDN port of a PABX system that is not part of the system), the extended configuration is activated automatically. In this case you do not have to input the activation or deactivation codes for extended confi-

Activating the extended configuration mode

Enter the code »**46 782 551 ##« (Vanity format »**INSTALL1##«).

Deactivating the extended configuration mode

Enter the code ***46 782 550 ##« (Vanity format ***INSTALL0##«).

If the ISDN telephone is disconnected from the ISDN network, (for example by unplugging the ISDN connector of the phone or by switching off or resetting the pabx), the extended configuration mode will be automatically switched off.

In the configuration described in the following, performance features and functions that can be only entirely or partially configured using »Extended configuration« are shown underlined in the display shots.

Example:



The display shows the performance feature Program tnumbs »Direct dialing« (underlined), that can only be configured with »Extended configuration« or using the »Professional Configurator«. In the "normal configuration" this performance VIP feature is not shown in the display.

Tel. drctry direct

Acoustic

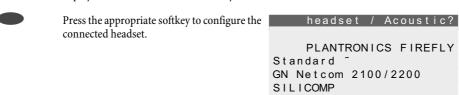
headset

If a special support feature is stored in your telephone for the headset your are using, set your phone for that headset model.

For example, the LED in the microphone extension for »Firefly F142 N« from Plantronics can be activated by the telephone.

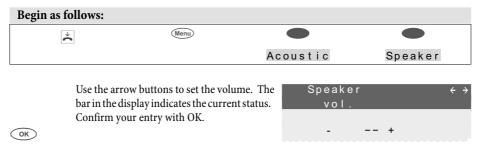


A check mark displayed next to the individual softkeys indicates the current status.

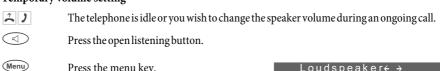


Speaker

Permanent handset volume setting



Temporary volume setting



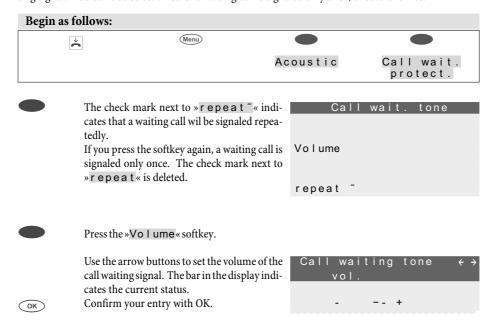




 $Press\,ESC\,in\,order\,to\,return\,to\,the\,normal\,display\,during\,an\,ongoing\,call.\,\,If you\,confirm\,your\,entry\,by\,pressing\,OK\,instead\,of\,the\,ESC, the\,permanently\,set\,value\,is\,overwritten\,by\,the\,newly\,set\,one.$

Call waiting

If the function call waiting (see page 65) is enabled on your telephone you can set the volume of the call waiting signal. You can also select whether a waiting call is signaled only once, or several times.

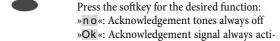


Acknowledgement signals

With your ISDN system telephone you can select whether the acknowledgement signals are always active, never active or only active when an incorrect entry is made. The default setting has the acknowledgement signal always active.



A check mark displayed next to the individual softkeys indicates the current status.



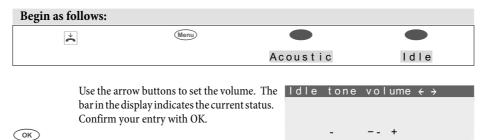
»Only error tn«: Acknowledgment signal active for erroneous input.



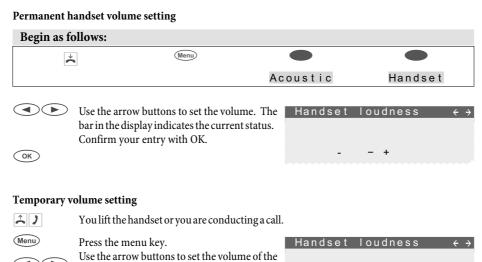
Idle

Notice tone volume for »Station guarding«

You have various options of setting your telephone to "Station guarding" (see page 43). You can set your telephone to signal incoming calls by a brief acoustic signal while "Station guarding" is active. The volume of that idle tone is adjustable.



Handset



handset. The bar in the display indicates the

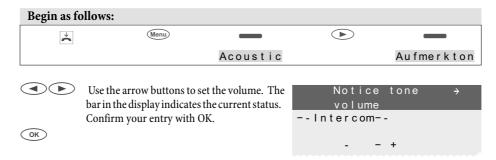
current status.



 $Press\,ESC\,in\,order\,to\,return\,to\,the\,normal\,display\,during\,an\,ongoing\,call.\,If you\,confirm\,your\,entry\,by\,pressing\,OK\,instead\,of\,the\,ESC, the\,permanently\,set\,value\,is\,overwritten\,by\,the\,newly\,set\,one.$

Notice tone (announcement and Intercom)

You can adjust the volume of the acoustic signal that is sounded at the beginning of an announcement and during intercom calls. The settings you have made for »Intercom « apply for announcements and intercom calls.



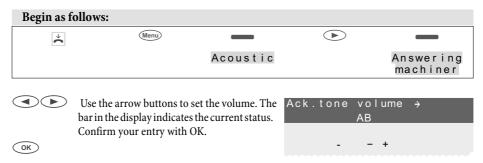
Announcement

Intercom

The menu items »Announcement« and »Intercom« do not relate to settings but rather to the use of these features (see page 22 /22).

Answering machine

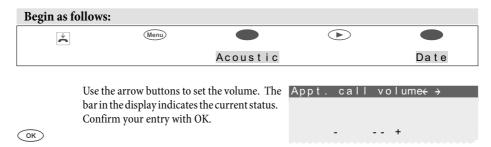
You can set the volume of the acknowledgement tone for the answering machine.



Date

Appointment reminder volume

You can set various appointments (see page 66) for your phone for which an acoustic and optical signal is issued when the set date and time are reached. You can set the signaling volume for the appointment as follows.



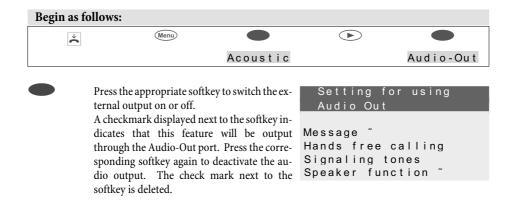
Audio-Out

Audio-Out-Features

The telephone is equipped with an audio output (Audio-Out socket). Several acoustic telephone functions can be used in parallel with the local speaker via this output. You can also connect external speakers, for example, to allow a message to be heard in the entire office.

The following features can be used with the audio output:

• Message, Open listening, Hands free calling, Calling signals.



Listening to Audio-In over the speaker

When the system telephone is idle, you can listen to audio signals directly from the system telephone speaker. You can also listen to MoH announcements or Internet music in this manner if your PC is not equipped with speakers.

Setting the volume



Settings



Use the arrow buttons to select the desired volumen



Settings

Direct call

You can program a direct call for your telephone so that when you press any key (except for ESC and the menu key) a set number will be dialed. If the automatic call function is active only one connection can be established to the set number. If you wish to establish a connection to a different number you must first deactivate the direct dial-in function.

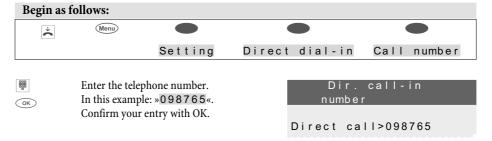
An active direct call is protected by means of the telephone PIN (see page 71). The direct call function can then only be deactivated after entering this PIN. As long as the PIN is set to »0000« (default setting), you do not need to enter the PIN and can continue by pressing OK.

The following functions are possible with the automatic dial-in activated:

- Automatic dialing of the set number after lifting the handset of your phone, or pressing any key (except for ESC and the F-menu key).
- Accepting calls, provided these are not suppressed by the call filter.
- Signaling of previously programmed appointment reminders.

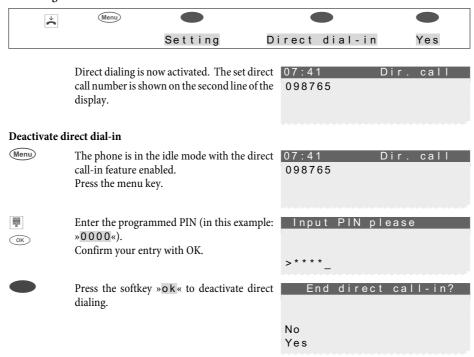
Further functions (e.g.: function keys, TAPI functions or headset operation) are not possible when direct dialing is activated.

Programming an automatic call number



If you are using your telephone with a PABX system without direct exchange line access, first enter the line access digit to obtain external line access followed by the automatic dial-in number

Activating direct call



Call rerouting (call forwarding)

With this telephone you can be reached, even if you are not in the vicinity of your phone. This is achieved by the system automatically forwarding calls to another internal or external number.

Call rerouting can be configured separately for any of the entered numbers (MSN). To utilize the call rerouting function you must have already configured at least one phone number.

The following settings are possible for all MSN extension numbers.

»delayed«	Delayed call forwarding: All calls for this number are signaled for a defined time at the exchange or in the PABX and are then forwarded when this period expires.
»busy«	Call forwarding on busy: The calls for a defined number are forwarded only when the telephone is busy. (FOR EXAMPLE.: There are already two (2) connections made, or one connection has been made and call waiting is not permitted)
»Fixed«	Direct call forwarding: All calls for a number for which "fixed" call rerouting has been configured are rerouted.

You can configure simultaneous delayed call rerouting and call rerouting on busy. If you have configured a set call rerouting, cancel this function before configuring a new (other) call rerouting function.

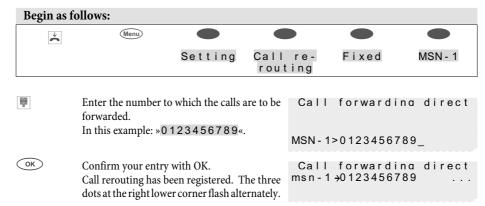
Your telephone will not ring, when this number is called.

If you operate your telephone with a pabx, please observe the call rerouting information (call forwarding) given in the operating instructions for your pabx.

If your is directly connected to the network termination unit, please observe the corresponding information supplied by the service provider.

Activate call forwarding

The following example describes how to set up MSN 1 for permanent call forwarding.



Viewing current call forwarding

When the telephone is idle, a ν U« on the second line indicates that Call rerouting has been activated. Press the ν Info ν softkey if you wish to have more information displayed for the programmed call rerouting.

Deactivating call rerouting

The following example describes how to set up MSN 1 for permanent call forwarding.



Special features for the Swiss version

In the default setting the telephone is designed for being operated at the internal ISDN port of a pabx. If you wish to use your telephone at the network termination unit or at a third-party pabx, you will have to change the call rerouting protocol (»Keypad« or »ETSI«) as described below.





Call waiting

If, during an ongoing call, a second call comes in for you, the second call is signaled when »Call wait. protect. on« is set. A caller will hear the busy signal, when you have set your telephone to »Call waiting off«. A waiting call is indicated by a brief acoustic signal in the speaker and also displayed. You can set the volume of the call waiting signal and select whether a waiting call is to be signaled only one time, or several times (see page 58).

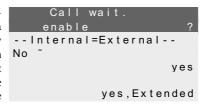
When the function »Silent signalling« is activated, call signalling is carried out as described for this feature. If you are using the hands-free option for an active connection, waiting calls will only be signaled optically in the display.

The following entries are possible for the call waiting feature:

Begin as follows:



Press the appropriate softkey below the desired call waiting type. The check mark next to a softkey indicates which setting is currently activated for selection in the first line. When there are various settings possible, first select the variant frm the first line and then the function from the lower lines. Repeat these steps until all variants are set.



External:

Internal:

You can select the settings to be used for call waiting; internal only, external only, or internal and external.

No:

With an ongoing connection or while a connection is being established, no further calls will be signaled.

Yes:

line Call waiting from only one subscriber is possible when:\line Only one or two active connections and no call waiting connection is present at your phone.

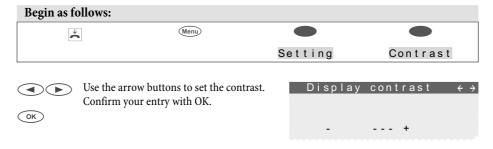


Yes, Extended:

Up to 4 simultaneous connections are possible on your telephone. For example, two further calls can also be signaled by call waiting while two other calls are already in progress.

Display contrast

You can set individual contrast levels.



Appointment

You have the option of setting three different appointments with your telephone:

- The set appointment is signaled daily.
- The set appointment is signaled once.
- The appointment is signaled weekly at the preset date and time.

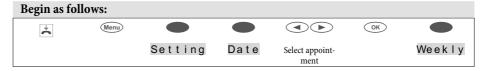
Once the date and time of the set appointment are reached, an acoustic (with fixed tune and volume) and optical signal is issued. The volume of the signal used to indicate an appointment can be adjusted individually (see page). You can store a text for each appointment (42 characters max.) which will be displayed when the appointment is reached.

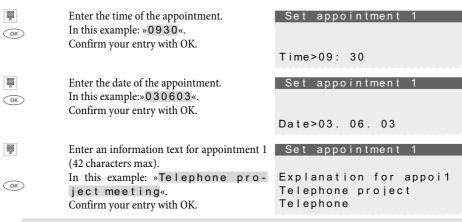
If you press ESC, signaling of the appointment is interrupted and then continued later as a reminder. To terminate signaling of an appointment press OK. Signaling of the appointment can also occur during a call, or when you have set the »Station guarding« feature.

When the telephone is idle, a »T« on the info line indicates that an appointment has been set up.

Programming an date reminder

The following example describes how to program a weekly appointment 1.





If you wish to only change the information text for an existing appointment, select that appointment using the arrow keys and then click the menu key.

Deactivating an appointment reminder

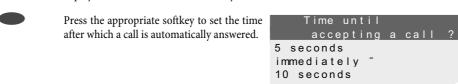


Auto-Answer

Your telephone can accept calls automatically, without you having to lift the handset or press the speaker (headset) key. The auto-answer feature can be switched on or off with a function key that has been programmed for this purpose.



A check mark displayed next to the individual softkeys indicates the current status.



Headset

Automatic headset use

If you have a headset connected to your telephone, you can use it automatically for specific features.

Automatic headset use active:

The call is taken via the headset when you press an extension or line key with automatic accepting of calls activated.

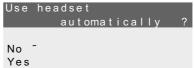
Automatic headset use not active:

The call is taken via the open listening/hands-free calling functions when you press an extension or line key with automatic accepting of calls activated.



A check mark displayed next to the individual softkeys indicates the current status.





Operation

This feature requires an »Extended Configuration«. It will otherwise not be displayed.



keypad / DTMF:

Default setting during a connection (Softkey »K e y p a d « oder »d t mf «)
Select whether in the initial settings »DTMF « or »k e y p a d « is possible during an ongoing call;



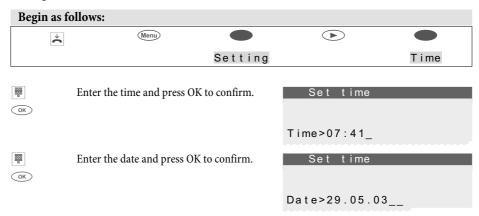
Mute:

Hands-free dialing (softkey »Mu t e «) Set whether the microphone is activated with the handset in place (e. g. hands-free calling), or whether it must be switched on by pressing the softkey » s p e a k «.

Caller list:

Actuate the softkey »Caller list«. If you select »Only messages«, this applies to the settings »Off" or »On«.

Setting the time



Call filter

The call filter allows specific calls to be put through or rejected on the basis of the recognized phone number.

You can enter up to five filter numbers (26 digits max.) for the call filter. Filter numbers can be local area codes or partial or complete numbers. When you enter » * * * * « you can include calls which do not transmit the number (caller ID) in the call filter. Using the call filter, calls whose numbers, or beginning numbers concur with the filter numbers entered in the system, can be rejected or accepted.

Rejected calls are saved in the caller list with a special flag. If the call was only signaled at your telephone the caller will hear the busy signal when the call is rejected by the call filter. If you are a member of a team, then this call will continue to be signaled at the phones of your team.

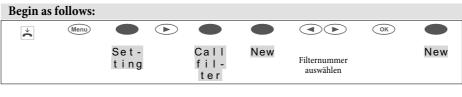
Call filter operating modes

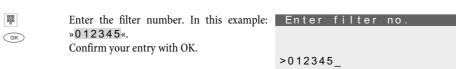
»no«	All calls signaled.
»reject«	$Calls \ whose \ numbers, or beginning \ numbers \ concur \ with stored \ filter \ numbers \ will \ be \ rejected.$
»forward«	Calls whose numbers, or beginning numbers concur with stored filter numbers will be signaled. All other calls are not signaled.
» all calls«	No calls are signaled.

Programming filter numbers

You can configure a new filter number, or use a number already stored in the telephone (redialing, telephone directory, VIP or speed dialing memory).

The following example describes how to enter a new filter number.

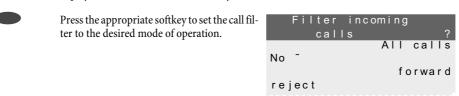




Programming call filter operating modes



A check mark displayed next to the individual softkeys indicates the current status.





The display shows you the various configuration possibilities. Press the desired softkey to have the next display shown.

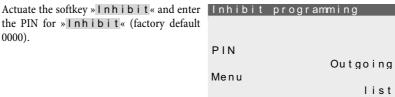


inhibit





the PIN for » Inhibit « (factory default 0000).



PIN

(password) for the telephone

Some telephone settings and operations are protected by a PIN (password).

- Access to the telephone menus (see page 72)
- Deactivate direct dial-in (see page 63)
- Remote control of the answering machine (option module)
- Access to the »Service « menu (see page 84)

Use this menu to set up your individual PIN (0000...9999). Please write down the entered PIN. If you forget your PIN, you will not be able to access any of the PIN-protected settings. In this case please ask your specialized dealer or distributor.





Attention: The PIN is also reset to (0000) after executing the service reset for restoring the initial state (see page 85).

Menu

Accessing a menu via the PIN:

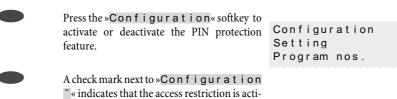
In these operating instructions, access to menus is always described without the use of a PIN. If you set the PIN protection for a specific menu, you can access this menu as described in the following example.



Protecting access to the telephone menus by a PIN

With the telephone PIN you can restrict access to the telephone menus (»Configuration«,»Setting« and »Program nos. «) and protect the stored charge data from unauthorized deletion. Before a menu can be called up (e.g. menu button and »Configuration« key), the PIN must be entered when the protection feature is active.

You can set access restrictions separately for the »Configuration«, »Settiing« and »Program nos. « menus. The » inhibit« and »Service« menus are always protected by the telephone PIN. Access restrictions for the »Configuration« menu will also apply for deleting stored charge data.



Press the »Configuration« softkey again to deactive the protection feature.

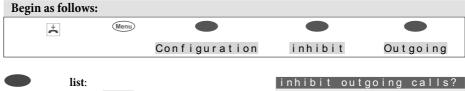
72

ve.

Outgoing

This feature requires an »Extended Configuration« to show on the display.

Here, you can determine which call control function(s) you want to configure.



Select » I is t « to enable or inhibit the numbers entered here for dialing. A checkmark shows you which list is active.

only Unrestricted numbe No list

Only unrestricted number:

Select »Only unrestricted numbers so if you wish to enable all unrestricted numbers for outgoing calls. If no unrestricted number have been entered, no further calls can be made. Numbers specified as unrestricted have priority over restricted numbers.

list

This feature requires an »Extended Configuration« to show on the display.

You can enter 7 unrestricted and 7 restricted numbers into your telephone.



Use the arrow buttons to select the desired call number or a free field and then confirm with »OK«. Then enter the new number or delete or edit an existing one.

Restricted/ unrestricted number

inhibit-6: inhibit-7:0190 Free-1:01901 Free-2:

Free-3:

Display

Call number

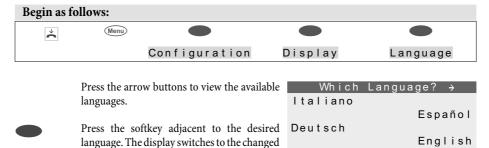
Use » i n c om i n g « and » o u t go i n g « to have your extension number or the number of the calling party presented. A checkmark shows you, which feature is currently active (in this example here: outgoing).





$Langu \neg age$

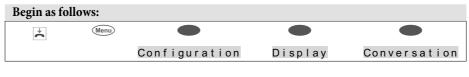
You can select the language of your display.

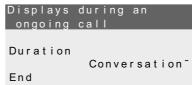


Conversation

Programming communication and charge displays

language immediately.





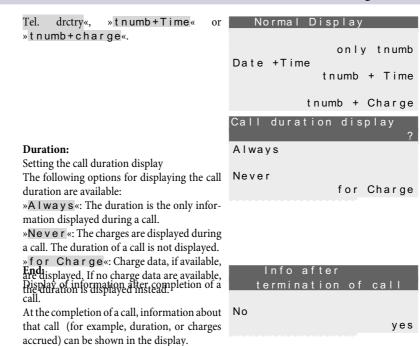
Nederland

Française

Conversation:

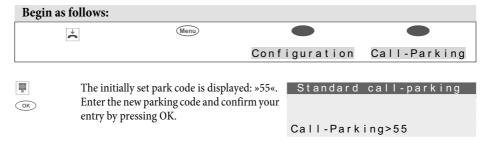
Configuring displays during an ongoing call. The following options are available:

»Date+Time«, »nur



Call-Parking (default setting)

A parking code of 55 is set in the initial state. You can change the default park code to a single- or double-digit code.



Connection to a pabx

This feature requires an »Extended Configuration« to show on the display.

If you operate your phone with a pabx, you can make all entries required here. Begin as follows:



PABX

type-id

Tel. drctry
External line
Numb. length
In. access

Type-ID

PABX-type (softkey » t ype - ID«)

Type 0: The PABX system does not transmit the line access digit on incoming calls. The line access digit must be entered in the phone.

Type 1: The PABX system transmits a line access digit on incoming calls. No line access digit should be entered in the phone.

Telephone directory:

With this setting you can define, whether the telephone directory of the pabx or the telephone book of the phone is loaded, when the »telephone directory « button is pressed.

The maximum length for internal numbers that are assigned to different internal extensions within your PABX system>

 $\label{lineaccess} \textbf{Lineaccess digit for the pabx:} \\ The lineaccess digit is placed automatically in front of the number of the caller for the external calls.$

In. access:

Direct exchange line access (softkey »ln. access«)

With direct exchange line access, you do not have to dial the line access digit for conducting outgoing calls.

MSN (extension numbers)

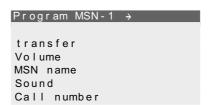
Up to 10 MSN (extension numbers) can be configured on your telephone. When you enter an MSN or extension number in your ISDN system telephone you are essentially defining that your ISDN system telephone is called using this MSN or extension number when a call is made. If you enter more than one MSN extension number in your telephone, your phone will ring each time one of these MSN extension numbers is called

If you are using your telephone on the external ISDN port of a pabx, enter its internal extension number into the pabx. Please observe the instructions in the PABX manual.

When you call a subscriber, you can select a certain number (MSN) that is transmitted to the subscriber (e. g. for separate charges). If you do not select any number, the number (MSN) that has been entered first in the phone (MSN-1) is used.

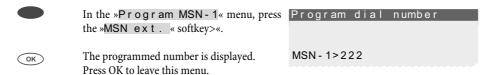
How to configure an MSN (extension number) is described in the following example with ν MSN - 1«.





Entering or viewing an extension number (MSN)

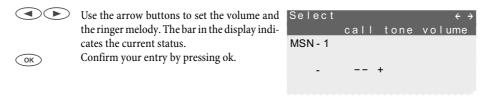
You can only enter the MSN extension numbers with the Professional Configurator supplied on the WIN-Tools CD-ROM. However, you can have the programmed number displayed at the phone. The extended configuration allows you to enter the MSN extension number after having entered a code number (see page 75)



You can only make further settings (e. g. call signaling melody, volume, name) if the number has already been previously configured.

Setting the melody and the volume

You can define and set a specific melody and its volume for each MSN or extension number that you enter. If you are using the telephone at an internal ISDN connection of certain elmeg PABX systems, you can program special ringing melodies and a different volume for internal calls.



In addition to steady volumes, you can also configure call signaling with an increasing volume. When this is done, the volume of the ringing tone is increased automatically as the call is signaled. When the increasing volume function is configured the following symbol is shown in the display »

Entering a name for an extension number

You can assign your own names (max. 8 characters) to the MSN extension numbers. On each of the buttons on the push-button set there are three or four letters of the alphabet. You can advance through the letters by pressing the appropriate button repeatedly (see page 12). If there are two consecutive letters on the same button of the push-button set, press the right arrow button after entering the first letter and then enter the next letter.



In the »Program MSN-1« menu press the »MSN Name « softkey «.

Own MSN esignation



Enter the name desired name. In this example: »private«. Confirm your entry with OK.

MSN-1>private

Programming a default call forwarding number

If you do not wish to accept a call, you can forward this call directly to a different phone number (see page). If you frequently forward calls to the same number, you can use this number as a default setting in your phone. If you then wish to forward a call, the default number will be presented first for you to use. The default setting for such a number is made separately for each number (MSN) entered in the telephone.

In the »Program MSN - 1 « menu press the » transfer « softkey> «.

Enter the desired telephone number. To dele- Call forward. number te an existing number press the C button.

OK

In this example: »0123456«. Confirm your entry with OK.

MSN-1>0123456_

Programming a specific PIN for an extension number (MSN)

You can assign separate PINs to all of your telephone's extension numbers (MSN). Using this PIN, you can enable or inhibit an extension number (MSN) for outbound calls.

In the initial state, all MSN-specific PINs are set to » 0 0 0 Program MSN-1« menu press the right arrow button and the »PIN« softkey«.



OK)

Enter the specific PIN for »MSN - 1« (default Input PIN please setting »0000«). If you have forgotten the MSN-specific PIN, you can access this menu via the individual PIN for the telephone. Confirm your entry with OK.



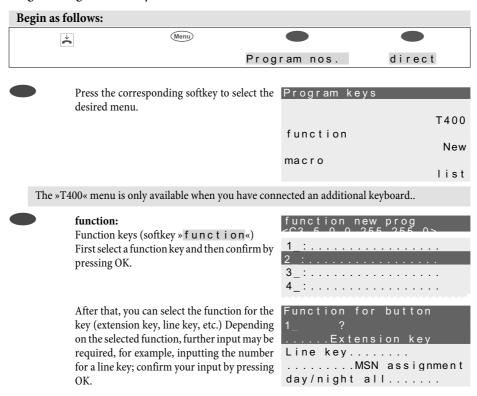
Enter the 4-digit specific PIN for MSN. In this example: »1234«. Confirm your entry with OK.

Change PIN

MSN-1>1234_

Programming numbers

Programming function keys



Function keys and further entries

function	Displays	Further entries	
MSN assignment	»msn-assignment«	Index of numbers (MSN 19) that are to be transmitted.	
Carrier/Provider prefix	»msn-assignment«	Telephone number index (MSN1 MSN-9) and code number of the desired provider (for example 01033).	
Call filter	»Filter«		
Call rerouting	»Call rerout. «	Index der Call number (msn-1msn-9), Call rerouting mode (1 - fixed, 2 - delayed, 3 - when busy) and call rerouting target.	
Direct dial-in	»Direct cal«		

Headset	»headset«	
Auto-Answer	»Auto. Accept on/off«	Telephone number index (MSN1 MSN-9) for which calls are automatically answered.
Userecall flash button	»User on/off«	Telephone number index (MSN1 MSN-9) you wish to use for all further programmings



macro:

Programming macro buttons (»macro« softkey>«)

Please select a function key first. First enter a name for that macro (max. 20 characters. Then enter the separate macro commands. A macro's command string is limited to 26 characters. Each command or button simulation consists of two characters. You can therefore only link a maximum of 13 commands together, or, for example, join 7 commands / key stroke simulations with a further 12 digits.

Commands and keys for macro programming

A macro consists of various commands, orecall flash button strokes, that are compiled into one command sequence and stored under a defined direct dialing key. When this function key is pressed, the individual commands contained in the macro are executed one after the other.

The following commands are available for macro programming:

- ${\tt "B"} {\tt "B"} {\tt "Initiating a call (same as lifting the handset)}$
- »D« Ending a call (same as replacing the handset)
- »ELSE« Alternative command, if a required condition (e.g., » IFLA« or » IFLB«) is not fulfilled.
- »IFLA« Execute this macro only when the LED for the first level is off (»IFLA«) or flashes
- » IFLB« (» IFLB«). If this condition is not fulfilled the procedure is discontinued, or resumed after
 - the command » ELSE « (where available).
- ${\tt »K} {\tt «} {\tt Keypad sequence; all of the following characters/digits are transmitted as a keypad sequence.}$
- »LA« Deactivate LED
- »LB« The LED flashes
- »LE« Activate LED
- »LZ« Activate LED for two seconds
- »n« Dummy number.

If a number is entered prior to execution of a macro (or for example, dialed from the telephone) this number is used in place of the dummy number in the macro.

»P« Pause (1 second) in the command sequence (between two characters/commands)

»RE« Re-establish the phone's idle state.

If there is an active connection at this phone, execution of this macro is canceled at this point.

»SE« Activating the speaker (normal volume)

»SA« Activating the speaker (low volume)

»T« DTMF-Sequenz: all of the following characters / digits are transferred as DTMF dialing.

»TS« Testing a connection.

If there is currently no connection active, or an outgoing connection can not be set up (for B. subscriber busy), execution of the macro is canceled at this point.

If you wish to incorporate a telephone key into a macro, press the corresponding key during macro programming (this is indicated, for example by » s5« in the display). All keys used for operating the telephone during macro programming (e. g. save, change entry position, delete entry or cancel) cannot be incorporated into the macro by simply actuating them, but need to be linked with the macro by means of the following commands.

» c « Actuation of the C-button.

»esc« Actuation of the ESC-button.

» f « Actuation of the menu button.

»« Actuation of the left arrow button.

» o k « Actuation of the OK button.

»« Actuation of the right arrow button.

»R« Press the key two times to reach the second level for the function keys.

Tastenbelegung für die Macro programming

Button	Press						
Button	1	2	3	4	5	6	7
1	1						
2	2	В	С				
3	3	D	ELSE	esc			
4	4	IFLA	IFLB				
5	5		K	LA	LB	LE	LZ
6	6	menu	N	ok			
7	7		P	r	RE	SA	SE
8	8	Т	TS				
9	9						
0	0						
*	*						
#	#						

Macro programming examples:

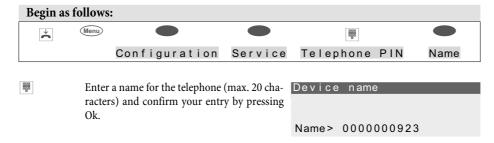
Function	Macro command string
Key programmed for a particular number (FOR EXAMPLE.: 012345 and activate LED for two seconds)	RE,B,0,1,2,3,4,5,LZ
Program an appointment reminder	RE,menu,s3,s5
Read new text messages (UUS1)	RE,,s6,s6,s2
Inhibiting the phone for all outbound calls »N«: Password for the telephone (Key for level 1, activate LED)	RE,menu,s5,s1,N,OK,s5,s4 ,LE,esc
Re-enabling the telephone for outbound calls »N«: Password for the telephone (key for level 2, deactivate LED)	RE,menu,s5,s1,N,OK,s5,s2 ,LA,esc
Add an entry to the telephone directory	RE,menu,s6,s2,s5
Activate/ de-activate the idle mode» yes, with no- tice signal « and LED display	RE,s5,IFLA,s5,ELSE,s2

Service

Name

Telephone name

You can assign a name (20 characters max.) to the telephone to provide it with unique identification within a PABX system. You will need the telephone name for example for configuring the telephone through the interal ISDN connection of a connected pabx. The default name entered is the telephone's serial number.



SMS

Number for the SMS center

These numbers can be edited using »Extended Configuration« only. It is possible to display the numbers and change the TX server.

With this system telephone you can send and receive SMS messages (text messages) to/from other phones in a fixed-line network or to/from mobile phones. (see page).

However, sending and receiving SMS messages is only possible, when this phone is connected to specific elmeg pabx systems. Please refer to the operating instructions for your PABX to determine whether SMS-features are provided with this particular telephone.

The number for the SMS service provider (max. three providers) must be stored in the telephone in order for you to send and receive SMSs with your telephone. Messages can be received using any of the three stored SMS servers, whereas transmitting of messages is carried out using only the server you have enabled for this. In the initial (default) settings for this telephone the number »0193010« is entered for the SMS center for Deutschen Telekom (German Telecom) and can be changed as described below.





OK)

Select the SMS server or enter the number for your SMS service provider without the line access digit.
For example: »0 193010«.

Confirm your entry with OK.



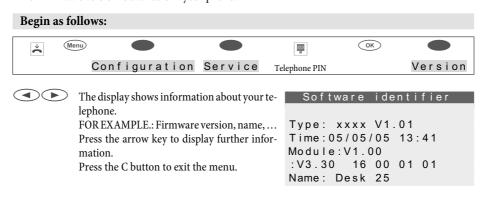
Creating and sending SMS messages

You can input a text message using the keypad on the system telephone. A short message is restricted to 612 characters) (iInterlaced SMS). The characters entered will be split into maximally four SMS messages.

Version

Reading the firmware version

You can have the version and the model of your phone displayed so that you can determine, for example, which firmware version is available in your phone.



Data

Reset - Restauring the default telephone settings

You can reset the telephone to its initial state using the procedure described below. All of the data that you have entered previously will be deleted. Or, you can delete only user-specific data such as: telephone directory entries, VIP destinations, SMS/UUS1 messages, data for the Answering machine module, the caller list and the redial list. Any function keys configured for these features will not be deleted.

If you have the T400 key expansion module connected to your telephone, all data associated with the key expansion module will be deleted when the procedures described below are executed.

Attention: Settings for the optional answering machine and any texts that have been stored will not be deleted. Please refer also to the instruction manual supplied with your answering machine.

Service





Press the softkey » o k « to reset the telephone to its initial state. If you do not wish to have the data deleted press the softkey » n o «.



When you press the corresponding softkey e.g.. » o k « the telephone is reset to the default configuration. All data is deleted, the telephone starts new. This could take several seconds to complete.



Software

Downloading new firmware

The functions described in the following require the WIN-Tools version V6.5 or higher. The CD-ROM contains the corresponding firmware for your system telephone.

- Do not press any keys (unless prompted to do so) or plug in or unplug any connectors while data transfer is in progress. If the connecting line is interrupted during a download, restart the download program and proceed as described previously.
- Once the new firmware has been loaded completely the telephone performs a RESET and is then available for use again.
- In some circumstances all of the data in your phone may be deleted after a firmware download. If
 this is the case, a notice is given prior to starting the download. Prior to downloading, save all of
 your telephone data (configuration, phone directory) to your PC.

Downloading new firmware using the telephone's USB port

You can load the newest firmware versions into your telephone via the phone's PC interface and using the WIN-Tools CD ROM supplied with the system.

- Connect the phone to the PC.
- Load the new firmware into your PC (e.g. from the Internet).
- Launch the download manager of the WIN-Tools.
- In the field »Type of connection« select the »USB« port.
- Go to »File«, »Open« and select the directory where the new firmware is stored.
- $\bullet \quad In the field \, "Status" \, click \, "Start \, Download" \, to \, begin \, downloading \, the \, new \, firmware.$

Downloading new firmware from the server PC

»Funkwerk Enterprise Communications GmbH« provides a server PC which can be used for loading new firmware into your telephone. In this case, the firmware is downloaded through the ISDN connection. Download can take 12 minutes approximately, depending on the size of the firmware file. Please note that there is a charge for loading firmware via an external ISDN connection.

You can use the Professional Configurator under »System telephones«, »Indirect software download« to trigger a manual firmware download. For this, no keys need to be pressed on the system telephone.

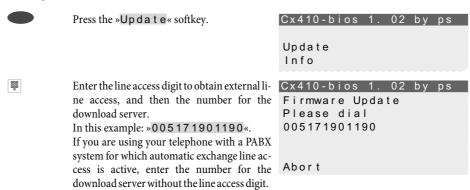
Important notice for export variants: Please ask your specialized dealer/distributor for the access number of the download server for your country!

Download server	Call number
elmeg server	++49-(0)5171-901190

Initiating download of new firmware on the phone:



The telephone then restars from the BIOS.



Service

To cancel a download already in progress press the »Abort « softkey or ESC.

In some circumstances all of the data in your phone may be deleted after a firmware download. If this is the case, a notice is given prior to starting the download: All datawillbeached on tinue?«. The firmware download is started only after you have confirmed this prompt by pressing $voldsymbol{voldsymbo$

Telephone BIOS

This telephone is equipped with a BIOS (basic functions) in English. The BIOS functions also remain available even if the firmware of the telephone does not operate properly, or if new firmware was not loaded completely (e. g. if the PC crashed while loading the firmware).

The following functions are available in the telephone's BIOS

- All phone calls are signaled. No number (MSN) has been entered in the telephone.
- Dialing of outgoing calls is possible after lifting the handset (no call preparation, no open listening or hands-free calling).
- Loading new firmware via the phone's PC port or via the ISDN connection.

Downloading new firmware via the PC port

To load new firmware in the BIOS of your telephone via the PC port, proceed as described on page 86 of these operating instructions.

Downloading new firmware via the ISDN connection



You are shown the BIOS menu for the telephone.

If you wish to load new firmware via the ISDN connection, press the »Update« softkey.

Cx410-bios 1.13 by ps

Update

Info

Now proceed as described on page 87 of these operating instructions.

Attention:: The settings for the »Set « softkey are used for service and diagnosis. Any settings you may make or modify in this menu will affect the overall functionality of your telephone. In some cases the telephone may not be able to be used if these settings are changed.

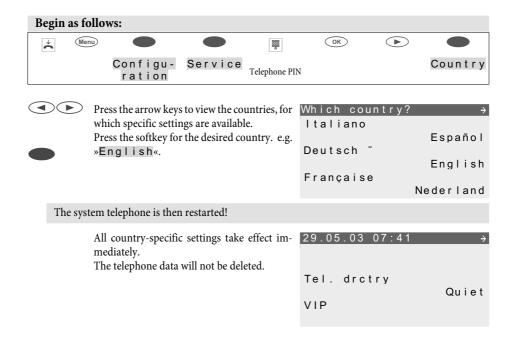
Country

Country-specific settings

Certain specific parameters need to be set if the telephone is to be used in a country other than the country configured as default.

This includes for example setting the language, the currency and certain default specific parameters for a country's ISDN network.

Check as described below whether you need to set country-specific parameters for the country in which the telephone is to be used.



Telephone and PC

The CS400 / CS400xt system telephone does not have a USB port! Functions can therefore not be used via USB.

CTI / TAPI using the phone's USB port

The abbreviations CTI and TAPI denote the standard interface for Windows telephony applications from Microsoft. Telephones and computers can work hand in hand via this interface.

CTI: Computer Telephony Integration

TAPI: Telephony Application Programming Interface

This allows you to dial directly from TAPI-compatible Windows programs, and the calls can be used by the software. Consequently, setting up a connection via TAPI is considerably faster than with normal calling. TAPI, with its standard Microsoft interface, has the advantage that it is already supported by a large number of programs and this number is growing all the time.

The TAPI functions of the telephone are available immediately after being connected to the PC and does not require any additional activation procedures to be performed at the telephone.

CAPI using the telephone's USB port

You do not require an additional ISDN card in your PC. The phone is equipped with an integrated USB port for connection to the PC. Based on the programs and drivers you have installed, you can use the telephone, for example to surf the Internet conduct data exchange, send/receive fax messages, or implement an answering machine via the PC.

CAPI: Common Application Programming Interface

- Only one B channel is available for all applications, to ensure that the telephone can be reached at all times. The applications being used can use this B channel one after the other.
- Do not use the same MSN in these PC applications as are used in the telephone.
- If a CAPI application is active on your PC and using the available B channel this is indicated in the
 display of the telephone by »ONL INE«. Only one B channel is then available for telephony while
 this application is in use.

Fax and data services (not included in the delivery)

Using a fax program you can send/receive fax messages from/with a number of different applications. Using a data transfer / file transfer program you can transfer data from one PC to another, or receive data from different PCs. You must have at least the following drivers installed to use this and other applications with your telephone:

USB- and CAPI drivers for the telephone

Internet access

Surf the Internet using your telephone. Use the software packages furnished by your service provider (for example T-Online, AOL) or the data transfer network of your Windows operating system for this. You must have at least the following drivers installed to use for telephone to surf the Internet:

- USB- and CAPI drivers for the telephone
- NDISWAN driver (required only for connection to the Internet via the Windows dial-up network)

Audio applications using the phone's audio jacks

The telephone is equipped with an input (2) and an output (3) for audio signals. Both these ports have a 3.5 mm stereo socket. When using the optional answering machine module, you can connect the telephone via these ports to the PC sound card in order to upload announcements into the phone or save recorded messages on the PC.

You can also use specific telephone features with the Audio-Out output (see page 61).

Contents of the WIN-Tools CD-ROM

In these operating instructions we would like to give you a brief summary of the software included in the scope of supply for the system. The software programs themselves are not described in these instructions. Should you have any questions or problems while you are using the programs, you can also refer to the online help function of the various applications for assistance. All of the programs used are provided with comprehensive online help.

Programs for telephone configuration (WIN-Tools)

- Professional Configurator:
 - Setting and configuration of the phone's individual features are done in the configuration process. You can set up MSN extension numbers or program VIP keys and function keys. You can also configure the phone's displays, set the volume of various signals, select dialing options (when the phone is connected to a PABX) or set the parameters for dial ranges and charge logging. The Professional Configurator is also used for programming an optional answering machine or the
 - The Professional Configurator is also used for programming an optional answering machine or the optional T400/T400/2 keyboard extension.
- Telephone Directory Manager:
 - Use the phone directory manager to create new entries for the phone directory (see page 29) or assign a special dial tone (VIP dial tone) to individual numbers. With the import / export function you can also import data from other programs or export data for further processing.
- Download Manager:
 - Use this program for loading new firmware for the telephone with your PC. A new firmware is loaded via the phone's PC port.
- Sound Manager:
 - You can use the sound manager to create your own call signaling melodies at the PC and then load these melodies into your telephone.

On completion of data exchange, the telephone undergoes an internal reorganization (of phone directory data for example). This process takes place automatically and may require a few minutes. During this time, certain telephone functions will not be available for use (e. g. phone directory).

Application programs

 Adobe Acrobat Reader Program for viewing and printing PDF documents.

Telephone and PC

Drivers

- CAP I dr i ver (Common ISDN Application Programming Interface)
 Links the telephone to programs that provide data communication functions.
 For example CAPI software (not included in the package)
- NDISWAN-driver (NDIS Network Device Interface Specification / WAN Wide Area Networking)
 - Integration of the telephone into the PC as a special ISDN network card e.g.Connection to the Internet via the Windows dial-up network
- TAPI driver (Telephony Application Programmer's Interface)
 Interfacing to programs that provide computer-aided telephony.
 e.g. Windows dialing assistant, CTI software (not included in the package)
- USB driver (Universal Serial Bus)
 Recognition and control of the phone after connecting to the USB port of the PC.
 For g. WIN-Tools programs

Important note for installation of the CAPI drivers:

Before installing the new drivers be sure to remove any existing CAPI drivers in your system (such as the drivers for an installed ISDN card), as Windows only supports one installed CAPI. Refer to the operating instructions for the device concerned, or for the operating system, for details on removing drivers.

In some special circumstances it may be necessary to also physically remove the ISDN card form your PC in addition to (virtually) removing the drivers.

Installing the programs from CD-ROM

At present, only Microsoft Windows operating systems are supported for connection of a PC to the telephone via the USB port.

PC requirements:

- IBM or 100% compatible PC
- Pentium or comparable processor, min. 133 MHz clock rate
- min. 32 MB RAM
- CD ROM drive
- Free USB-port
- Windows 98SE / ME / 2000 / XP operating system
- Min. 80 MB free hard disk space for installation

Installation sequence

- Start up your PC.
- Insert the CD ROM supplied with the system in the CD ROM drive of your PC.

Telephone and PC

- Wait a moment until the program starts automatically. If the autostart option is not activated in your PC you can start the file »setup. exe« directly from the main directory of the CD using Windows Explorer (double click on the file), or using the option »Run« in the Windows start menu.
- The welcome screen for the CD is displayed after you start the file.
- Install the programs and drivers in the order given:

CAPI driver

WIN-Tools programs

TAPI driver

CTI software (not included in the package)

CAPI software (not included in the package)

NDISWAN driver

• Connect the telephone to the PC's USB port as described on page . The telephone is automatically detected by the PC.

Installation of a device driver is started automatically the first time you connect the telephone to the PC. The device driver is located in the root directory of the CD-ROM. Follow the instructions displayed on the monitor.

• You can then use your phone together with the installed PC programs.

Appendix

Declaration of conformity and CE mark

This device meets the requirements of the following EC directive R&TTE 1999/5/EG:



»Richtlinie 1999/5/EG des Europäischen Parlaments und des Rates vom 9. März 1999 über Funkanlagen und Telekommunikationsendeinrichtungen und die gegenseitige Anerkennung ihrer Konformität«

»Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity«

You can also request this EC declaration of conformity at the following Internet URL: http://www.elmeg.de/produkte/konformitaet/

Default telephone settings

- The serial number is entered as the telephone name.
- Display language: deutsch
- Country-specific settings:deutsch
- No MSN extension numbers are stored.

Ringer melody volume: Level 3, ringer melody: Number 1; No call forwarding or deflection numbers, no MSN extension name, MSN cost account deactivated, PIN for the MSN extension: 0000, MSN enabled for dialing

- No entries are stored in the caller / memo list and the redial list.
- No entries are stored in telephone directory or the VIP memory.
- No function keys programmed (direct dial, functions, macros).
- 10 permanently stored ringer melodies. 10 storage places for additional melodies.
- No UUS1 text messages are stored.

Reception of internal (pabx) and external text messages is possible. No automatic relaying of text messages with a call.

- No SMS text messages are stored. Number for the SMS center: 0193010 (SMS server of Deutsche Telekom AG>
- Silent signalling for the telephone is switched off.
- Display contrast: Level 4
- Speaker volume: Level 4
- Handset volume: Level 2
- Acknowledgement signals and error tones are active.
- Appointment reminder volume: Level 3
- Silent signalling tone volume: Level 3
- Call waiting tone volume: Level 3, call waiting tone repeat feature is active

Appendix

- No output of audio signals over the Audio-Out port.
- Numbers are identified with incoming and outgoing connections (CLIP / COLP).
- Telephone number and costs are displayed. The call duration is shown when no cost data are available.
- Display of information after completion of a call (e.g. duration)
- Cost data: Tariff 0. 062 and currency POUND
- Call wait. protect. is switched off.
- Dates are switched off. No appointment data stored. Date: 11. 11. 02 / Time: 11:11
- Auto-Answer time: immediately
- Headset use is not configured. Headset type: Standard
- Dialing status during an ongoing call: DTMF-dialing
- Microphone switched off after handsfree dialing.
- Call filter switched off, no filter number stored.
- Automatic call switched off, no automatic dial-in number stored.
- PIN for the telephone: 0000
- Dial ranges switched off, no restricted or unrestricted numbers stored.
- Menu access is not PIN-protected.
- PABX type: 0
- Internal number length for the pabx: 4
- Parking code: 55

Appendix

Technical specifications

Dimensions (L x W x H): approx. 255 x 180 x 100 mm

Weight: approx. 0.8 kgTemperature range $+5^{\circ}\text{c} \dots +40^{\circ}\text{c}$ Operation: $-25^{\circ}\text{C} \dots +70^{\circ}\text{C}$

Storage:

ISDN port (CS410, CS400)

Connection cord length: approx. 6 meters

ISDN connection: DSS1 protocol, point-to-multipoint access

Channel structure: B + B + DPower consumption: ≤ 1 Watt

Up0-Connection (CS410-U)

Connection cord length: approx. 6 meters

Up0-Connection: DSS1 protocol, point-to-point

Channel structure: B + B + DPower consumption: ≤ 1 Watt

Output: ISDN port, DSS1 protocol, Point-to-multipoint connection

Power at output: max. 1 Watt

USB port

Length of USB connection cord: approx. 3 meters

Terminal: Self powered terminal

Speed rating: Full Speed USB-standard: 1.1

Audio connections

PC-audio cable length: approx. 2.5 m, 3.5 mm stereo plug

A	В
Accepting a call 17	Boss/secfunction 51
waiting call 27	Broker's call
Acknowledgement signals 13	Buttons
setting	C
Acoustic	Call Deflection 17
Adding telephone book entries 30	Call filter
Additional keyboard 3	programming 70
Adobe Acrobat Reader 91	programming filter numbers 69
Announcement	Call forwarding 63
Anrufer- / Memo list 32	Call number (msn)
Answering machine 3	charge limitation 45
PIN for remote control 71	Call rerouting 51,63
Answering machine LED 13	Call rerouting in Switzerland 64
Answering machine module 3	Call signaling
Assignment for the headset jack 7	Call switching 27
Audio applications 91	Call waiting 27
Audio in / Audio out 8	Call waiting configuration
Audio in / Audio Out	call waiting tone volume 58
Audio-In	repetition of the call waiting tone 58
Audio-In over the speaker 61	Call waiting tone repetition 58
Audio-Out	Caller and memo list
Auto-Answer	view
Automatic answer 67	Caller list
Automatic redialing	Caller/memo list
deactivate	dialing a number 17
suspend	Call-LED
Automatic use of a headset 67 Automatical recall	Call-Parking programming 75
on no answer	Cancelling calling line number identification
automatical recalll	for the next call 17
	CAPI using the USB port 90
to busy subscriber 24	CAPI-driver

CCBS (recall to busy subscriber) 24 CCNR (Completion of call on no answer) 24 CD-ROM contents	inhibiting an extension number for outgoing calls
setting	D
cleaning the telephone 5	Daily appointment call 66
Completion of call on busy, automatic . 23	Data
Completion of call to busy subscriber (CCBS)	Data transfer (File Transfer) 90
Conference	Day/night mode 51 Declaration of conformity
Configuration 56,57,58,59,60,61,71,72,73,74,75,76,77,78,7	default telephone settings
Configuration, extended 56	reset
Connecting the audio jacks 8	Deflecting a call 17
connecting the ISDN cord 5	Deleting telephone book entries 30
Connecting the PC connection cable (USB)	Direct call
connecting the telephone 5	Direct dial-in
Connecting the telephone	PIN to deactivate 71
headset 6	Direct dial-in using function keys 16
PC (USB / Audio)	display
Connecting the telephone to the S0 5	Display
Connecting the telephone to the Up0 5	setting the contrast 66
Connection keys 50	setting the language 9,74
Connection to a pabx	Display language 9,74
Contents of the CD-ROM 91	Displays during a call
Adobe Acrobat Reader 91	viewing
drivers	Displays during an ongoing call 46
telephone setup 91	setting
Controlling costs	Download Manager

using the ISDN-connection 87	boss/sec- button 51
using the USB port 86	call rerouting 51
Drivers on the CD-ROM 92	day/ night mode 51
dtmf dialing	direct dial / DTMF-/ keypad sequences
E	direct dial-in 52
Editing telephone book entries 30	extension key 50
Editing VIP entries	Headset on/off
Eingabe of Makros 82	intercom 51
Electrostatic charges 4	intercom on/off 51
Entering a memo	line key 49
Entering a name for an extension number	log-on/off
Entering letters	macro functions 53
Extended configuration	message on/off
Extended last number redial 18	MSN assignment 49
Extension key 50	programming 54
Extension key for an answering machine 52	router key
Extension number (msn)	status info
programming a specific PIN 78	team key 50
Extension number (MSN)	trunk group button 49
defining for the next call 49	user on/off
entering or viewing	Voice Mail-Button
extensions	Н
Extensions	hands free Calling 21
Additional keyboard 3	headset
answering machine module 3	settings
Up0/S0-module 3	Headset 6,21
F	connecting 6
Firmware download 86	assignment for the jack 7
Firmware version of the telephone 85	automatic use 67
Function keys 13,49	Headset ON/OFF 52
call filter 51	I
announcement 51	Idle tone
auto-answer 52	Information text for phone book entries 29

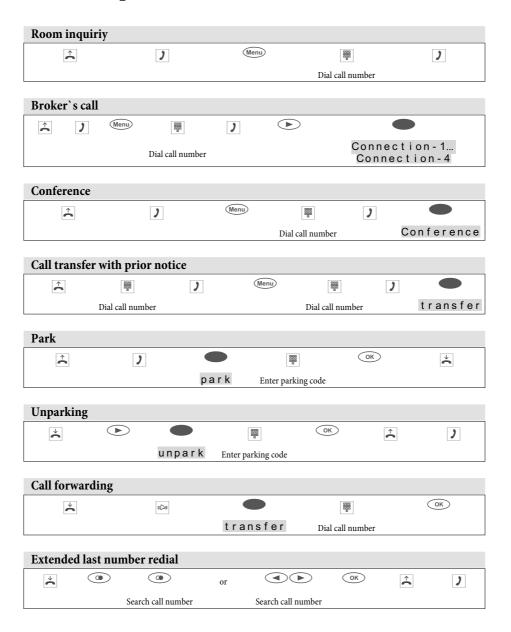
Inhibit	Message inhibiting filter 51
Input mode for entering letters 13	Microphone on/off 20
Installation sequence from the CD ROM 92	Monitoring charges
Intercom	charge limitation 45
Intercom inhibiting filter 51	Monitoring costs kontrollieren 43,44,45,46,47,48
Intercom notice tone	
Internet access	Mounting the telephone feet 4 msn (call number)
K	,
Keypad 26	charge limitation
L	MSN (extension number)
LED for calls and AM 13	defining for the next call
LEDs	enable/inhibit for outgoing calls 46
Letters	entering or viewing
Line key 49	programming a specific PIN 78
Loading firmware	MSN assignment
using the ISDN-connection 87	for phone book entries 29
using the PC-connection 86	Muting
Loading new firmware 86	MWI
from the telephone BIOS 88	N
using the ISDN-connection 87	Name
using the USB port 86	NDISWAN-driver 92
Log-on (team) 51	Negative acknowledgement signal 14
M	Notice tone (announcement and Intercom)
macro	
Macro functions 53	NTBA
Eingabe of Befehlen und Tasten 82	Number for the SMS center 84
Malicious call identification (MCID)	Nummern programmieren 29
after a call 25	0
during an ongoing call 25	One-time appointment call 66
MCID (Tracing) 25	Open listening 21
Message Waiting Indication (MWI) 33	Operation
Memo list	P
Menu access protected by PIN 72	PABX
Message	

function keys 49	S
system menu 55	safety notes
Parking a call 24	Secfunction 51
PC-requirements 92	Send/ receive faxes 90
pictographs	Setting calling line identification
PIN-protection for telephone menus 72	for the next call 17
placing the telephone 4	for the next call
Pocket money account 45	Setting the currency 45
Positive acknowledgement signal 14	Setting the display contrast 66
Professional Configurator91	Setting the handset volume 59
Programming a specific PIN for an extensi-	Setting the headset type 57
on number	Setting the park-code
Programming a telephone PIN 71,72	Setting the ringer melody (sound)
programming an automatic call number 62	at at pabx
Programming appointment reminders . 66	Setting the speaker volume 57
programming call number display 48	Setting the tariff factor 45
Programming call waiting mode 65	Setting the volume 61
Programming charge limitations 45	Appointment call 60
Programming filter numbers 69	call waiting tone 58
Programming numbers 80	handset
Programming telephone numbers 31	silent signalling 59
Programming VIP entries	speaker
Programs on the CD-ROM 91	Settings 62,63,64,65,66,67,68,69,70
Protection against electrostatic charges 4	Settings, country-specific 88
R	Silent signalling 43
Recording button 53	notice tone volume 59
Redialing	SMS
automatic	viewing
extended	SMS / UUS1 messages
Rejecting a call	SMS center
Requirements for the PC 92	SMS messages
Reset	SMS text message
Router button 53	error during transmission 42
Rückfrage 26	error while receiving 42
	SMS text messages

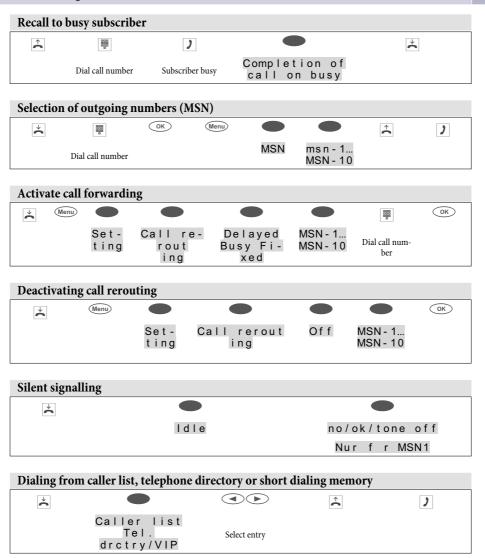
creating and sending 38,85	Telephone BIOS 88
creatng and sending 85	telephone directory $\dots \dots 29$
Software	Telephone directory
Sound Manager 91	adding an entry 30
Special dial tone for telephone directory 31	deleting an entry 30
Special dial tone for telephone directory en-	dial call number 16
tries	editing an entry 30
Special dial tone für telephone directory 29	information text for an entry 29
Specifying the outgoing number 18	outgoing number for an entry 29
for phone book entries 29	special dial tone (VIP-tone) 31
Starting a call	Telephone directory for the PABX 16
dialing from the caller/memo list 17	Telephone Directory Manager 91
dialing from the telephone directory 16	Telephone name
dialing from the VIP memory 16	Terminrufe einstellen
direct dial-in using function keys 16	Volume 60
with fixed extension number (MSN) 18	Text messages $\dots \dots 37$
without calling line identification (CLIR) 17	configuring the reception mode (UUS1 only)
Status info	
Status info button 52	creating and sending
Status LED	viewing
Suppressing calling line number identificati-	save (UUS1 only) 41
on	Tone dialing
for the next call 17	Tracing (MCID)
Suppressing the calling line 48	Transferring a call
Switching call modes 51	Transferring a call to a busy subscriber . 27
Switzerland, call rerouting 64	Trunk group button 49
System menu when connected to a pabx 55	U
System parked inquiriy 50,53	unpacking and placing the telephone 4
T	Unpacking the telephone 4
TAPI driver	$Up0/S0\text{-module}\ \dots\dots\dots\dots\ 3$
TAPI using the USB port 90	USB driver
Team keys 50	User on/off button 52
Team log-on/log-off 51	UUS1 Inhibiting filter 33
Team log-on/off 51	UUS1 messages
technical specifications 96	viewing

UUS1 text messages	dial call number 16
configuring the reception mode 42	VIP-Memory
creating and sending 38	editing an entry 32
automatic sending (UUS1 only) 41	programming an entry 31
save 41	VIP-Tonruf für Telefonbucheinträge 29
V	Voice Mail
Version	Voice Mail key 53
Viewing and deleting costs 43	Voice Mail-Button 52
last call 44	W
specific extension numbers (MSN) . 44	Weekly appointment call 66
total costs 44	WIN-Tools on the CD-ROM 91
VIP-memory	

Brief description of functions



Brief description of functions





Endkunden-**Hotline 01 90/51 01 10**

pro Minute 0,62 EURO

Mo. - Fr. 08.00 Uhr bis 12.00 Uhr 13.00 Uhr bis 17.00 Uhr

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